

## WEST Search History

DATE: Wednesday, January 10, 2007

Hide?	<u>Set</u> <u>Name</u>	<u>Query</u>	<u>Hit</u> <u>Count</u>
	<i>DB=PGPB; PLUR=YES; OP=ADJ</i>		
<input type="checkbox"/>	L22	l21 and (propionate or propionate ester.CLM.)	63
<input type="checkbox"/>	L21	l20 and (saponific\$ or acidif\$ or transesterif\$.CLM.)	78
<input type="checkbox"/>	L20	l17 and (ring closing or ring closure or cycliz\$ or cyclis\$.CLM.)	129
<input type="checkbox"/>	L19	l17 and l18	3
<input type="checkbox"/>	L18	glycidyl lactate or glycolate.CLM.	621
<input type="checkbox"/>	L17	l16 and (boron trifluoride or BF3 or acid catalyst or acidic catalyst or mineral acid or solid acid.CLM.)	859
<input type="checkbox"/>	L16	l15 and (aldol or condens\$ or coupl\$.CLM.)	4378
<input type="checkbox"/>	L15	l13 and l14	6618
<input type="checkbox"/>	L14	epoxide or epoxy compound or ethylene oxide or diethylene oxide.CLM.	43827
<input type="checkbox"/>	L13	lactic acid derivative or lactic acid ester or lactate or lactate ester or \$dioxanone.CLM.	28057
	<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ</i>		
<input type="checkbox"/>	L12	l11 and (saponific\$ or acidif\$ or transesterif\$)	45
<input type="checkbox"/>	L11	l7 and (ring closing or ring closure or cycliz\$ or cyclis\$)	72
<input type="checkbox"/>	L10	l9 and (propionate or propionate ester)	135
<input type="checkbox"/>	L9	l8 and (saponific\$ or acidif\$ or transesterif\$)	207
<input type="checkbox"/>	L8	l5 and (ring closing or ring closure or cycliz\$ or cyclis\$)	361
<input type="checkbox"/>	L7	l5 and l6	418
<input type="checkbox"/>	L6	glycidyl lactate or glycolate	22380
<input type="checkbox"/>	L5	l4 and (boron trifluoride or BF3 or acid catalyst or acidic catalyst or mineral acid or solid acid)	2466
<input type="checkbox"/>	L4	l3 and (aldol or condens\$ or coupl\$)	12206
<input type="checkbox"/>	L3	l1 and l2	16291
<input type="checkbox"/>	L2	epoxide or epoxy compound or ethylene oxide or diethylene oxide	247772
<input type="checkbox"/>	L1	lactic acid derivative or lactic acid ester or lactate or lactate ester or \$dioxanone	83061

END OF SEARCH HISTORY

=> d his

(FILE 'HOME' ENTERED AT 13:12:57 ON 10 JAN 2007)

FILE 'CASREACT' ENTERED AT 13:13:13 ON 10 JAN 2007

L1           STRUCTURE UPLOADED  
L2           0 S L1  
L3           1 S L1 FULL

FILE 'REGISTRY' ENTERED AT 13:14:17 ON 10 JAN 2007

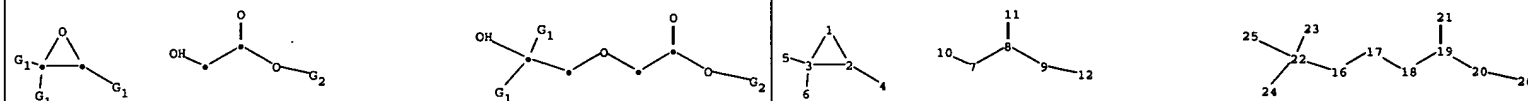
L4           STRUCTURE UPLOADED  
L5           5 S L4  
L6           610 S L4 FULL  
L7           STRUCTURE UPLOADED  
L8           3 S L7  
L9           678 S L7 FULL

FILE 'HCAPLUS, CHEMCATS' ENTERED AT 13:18:44 ON 10 JAN 2007

L10          957 S L6  
L11          431 S L9  
L12          33 S L10 AND L11  
L13          5 S L5

FILE 'HCAPLUS, HCAOLD, USPATFULL, EPFULL' ENTERED AT 13:32:59 ON 10 JAN 2007

L14          174863 S LACTIC ACID DERIVATIVE OR LACTIC ACID ESTER? OR ?LACTATE OR L  
L15          5876 S L14 AND (EPOXIDE OR EPOXY COMPOUND OR ?OXIRANE)  
L16          4695 S L15 AND (COUPL? OR CONDENS?)  
L17          1038 S L16 AND (BORON TRIFLUORIDE OR BF3 OR ACID CATALYST OR MINERAL  
L18          2 S GLYCIDYL LACTATE  
L19          167 S L17 AND (RING CLOSING OR RING CLOSURE OR CYCLIZ? OR CYCLIS?)  
L20          98 S L19 AND (SAPONIFIC? OR ACIDIFI? OR TRANSESTERIF?)  
L21          62 S L20 AND (?PROPIONATE OR ?PROPIONATE ESTER)  
L22          12 S L21 AND (FRAGRANCE OR FLAVOR OR FLAVOUR OR ORGANOLEPTIC)



chain nodes :

4 5 6 7 8 9 10 11 12 16 17 18 19 20 21 22 23 24 25 26

ring nodes :

1 2 3

chain bonds :

2-4 3-5 3-6 7-8 7-10 8-9 8-11 9-12 16-17 16-22 17-18 18-19 19-20 19-21  
20-26 22-23 22-24 22-25

ring bonds :

1-2 1-3 2-3

exact/norm bonds :

1-2 1-3 2-3 2-4 3-5 3-6 7-10 8-9 8-11 9-12 16-17 17-18 19-20 19-21 20-26  
22-23 22-24 22-25

exact bonds :

7-8 16-22 18-19

G1:H, MeO, EtO, n-PrO, i-PrO, PhO, Cb, Ak

G2:Cb, Ak, PhO

Match level :

1:Atom 2:Atom 3:Atom 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS 10:CLASS  
11:CLASS 12:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS 21:CLASS 22:CLASS  
23:CLASS 24:CLASS 25:CLASS 26:CLASS

fragments assigned product role:

containing 16

fragments assigned reactant/reagent role:

containing 1  
containing 7

L1        STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1                STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 13:13:42 FILE 'CASREACT'

SCREENING COMPLETE -        5051 REACTIONS TO VERIFY FROM        321 DOCUMENTS

99.0% DONE        5000 VERIFIED        0 HIT RXNS        0 DOCS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED VERIFICATIONS:        96774 TO        105266

PROJECTED ANSWERS:                0 TO                0

L2                0 SEA SSS SAM L1 (        0 REACTIONS)

=> s l1 full

FULL SEARCH INITIATED 13:13:49 FILE 'CASREACT'

SCREENING COMPLETE -        101448 REACTIONS TO VERIFY FROM        6314 DOCUMENTS

100.0% DONE        101448 VERIFIED        1 HIT RXNS        1 DOCS

SEARCH TIME: 00.00.18

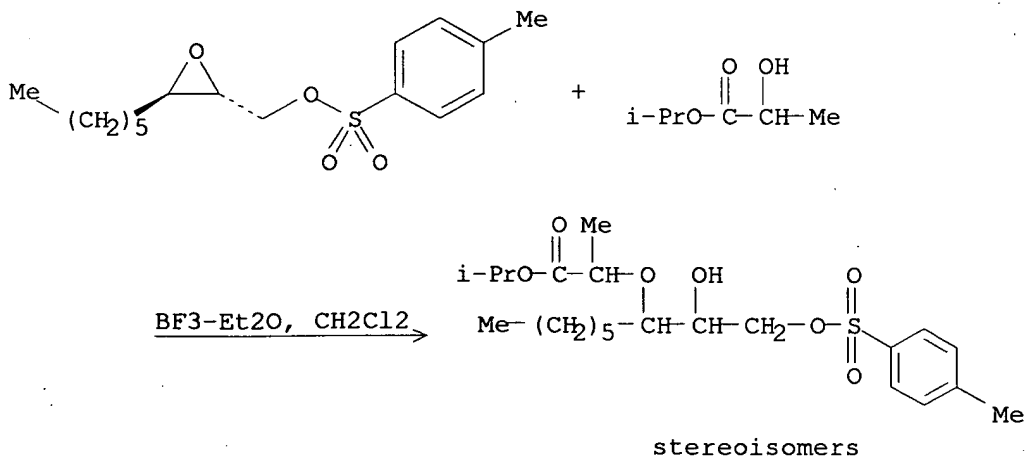
L3                1 SEA SSS FUL L1 (        1 REACTIONS)

=> d scan

L3        1 ANSWERS        CASREACT        COPYRIGHT 2007 ACS on STN

TI        Synthesis of acyclic, multifunctionalized  $\alpha,\alpha'$ -disubstituted  
ethers with full control of chemo-, regio- and enantioselectivity

RX(7) OF 40



NOTE: stereoselective, regioselective, chemoselective,  $\text{CHCl}_3$ /solvent  
can be also used, 40% overall yield

ALL ANSWERS HAVE BEEN SCANNED

=> file reg

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
114.00	114.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 13:14:17 ON 10 JAN 2007  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 9 JAN 2007 HIGHEST RN 917076-17-6  
DICTIONARY FILE UPDATES: 9 JAN 2007 HIGHEST RN 917076-17-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and  
predicted properties as well as tags indicating availability of  
experimental property data in the original document. For information  
on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=>

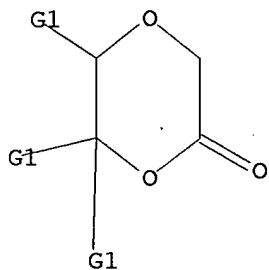
Uploading C:\Program Files\Stnexp\Queries\059-2.str

L4 STRUCTURE UPLOADED

=> d

L4 HAS NO ANSWERS

L4 STR



G1 H, MeO, EtO, n-PrO, i-PrO, PhO, Ch, Ak

Structure attributes must be viewed using STN Express query preparation.

=> s 14

SAMPLE SEARCH INITIATED 13:14:36 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 5433 TO ITERATE

36.8% PROCESSED 2000 ITERATIONS  
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
SEARCH TIME: 00.00.01

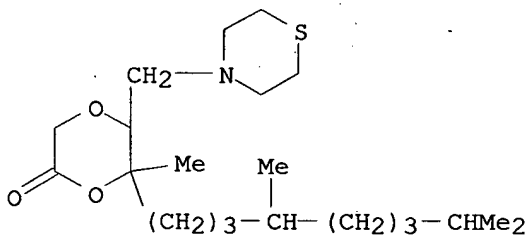
5 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 104241 TO 113079  
PROJECTED ANSWERS: 50 TO 492

L5 5 SEA SSS SAM L4

=> d scan

L5 5 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
IN 1,4-Dioxan-2-one, 6-(4,8-dimethylnonyl)-6-methyl-5-(4-  
thiomorpholinylmethyl)- (9CI)  
MF C21 H39 N O3 S

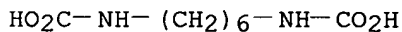


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

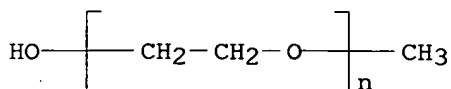
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):4

L5 5 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
IN 1,4-Dioxane-2,5-dione, 3,6-dimethyl-, polymer with 1,4-dioxan-2-one,  
1,6-hexanediylbis[carbamate], ester with  $\alpha$ -methyl- $\omega$ -  
hydroxypoly(oxy-1,2-ethanediyl) (2:1:2), block (9CI)  
MF C8 H16 N2 O4 . 2 (C6 H8 O4 . C4 H6 O3)x . 2 (C2 H4 O)n C H4 O

CM 1

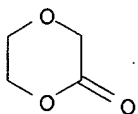


CM 2

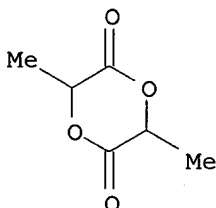


CM 3

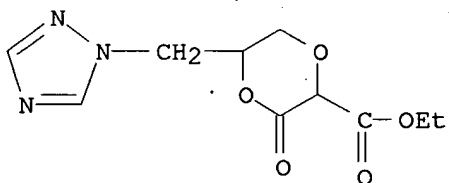
CM 4



CM 5

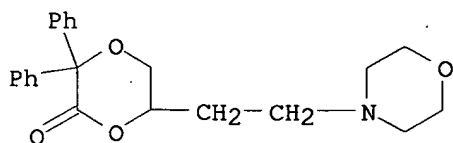


L5 5 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
 IN 1,4-Dioxane-2-carboxylic acid, 3-oxo-5-(1H-1,2,4-triazol-1-ylmethyl)-, ethyl ester (9CI)  
 MF C10 H13 N3 O5



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

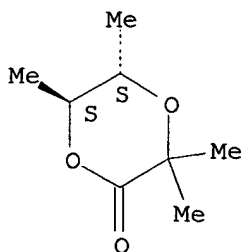
L5 5 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
 IN p-Dioxan-2-one, 6-(2-morpholinoethyl)-3,3-diphenyl-, hydrochloride (8CI)  
 MF C22 H25 N O4 . Cl H



● HCl

L5 5 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
 IN 1,4-Dioxan-2-one, 3,3,5,6-tetramethyl-, trans- (9CI)  
 MF C8 H14 O3

Relative stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

ALL ANSWERS HAVE BEEN SCANNED

=> s l4 full

FULL SEARCH INITIATED 13:14:52 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 108902 TO ITERATE

100.0% PROCESSED 108902 ITERATIONS

610 ANSWERS

SEARCH TIME: 00.00.02

L6 610 SEA SSS FUL L4

=>

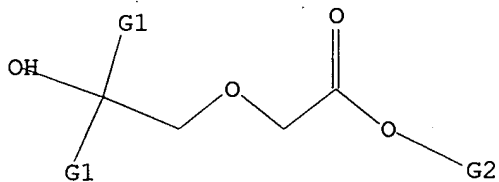
Uploading C:\Program Files\Stnexp\Queries\059-3.str

L7 STRUCTURE UPLOADED

=> d

L7 HAS NO ANSWERS

L7 STR



G1 H, MeO, EtO, n-PrO, i-PrO, PhO, Cb, Ak

G2 Cb, Ak, Ph

Structure attributes must be viewed using STN Express query preparation.

=> s l7

SAMPLE SEARCH INITIATED 13:17:22 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 42754 TO ITERATE

4.7% PROCESSED 2000 ITERATIONS

3 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

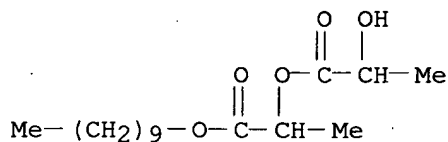
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
 BATCH \*\*COMPLETE\*\*  
 PROJECTED ITERATIONS: 842734 TO 867426  
 PROJECTED ANSWERS: 802 TO 1762

L8 3 SEA SSS SAM L7

=> d scan

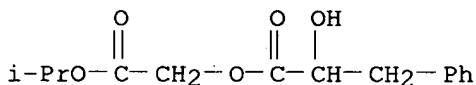
L8 3 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
 IN Propanoic acid, 2-hydroxy-, 2-(decyloxy)-1-methyl-2-oxoethyl ester (9CI)  
 MF C16 H30 O5



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

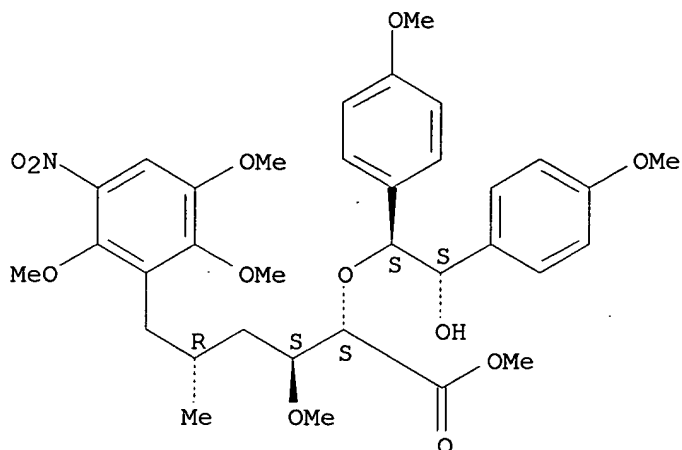
L8 3 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
 IN Benzenepropanoic acid,  $\alpha$ -hydroxy-, 2-(1-methylethoxy)-2-oxoethyl ester (9CI)  
 MF C14 H18 O5



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L8 3 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
 IN Benzenhexanoic acid,  $\alpha$ -[(1S,2S)-2-hydroxy-1,2-bis(4-methoxyphenyl)ethoxy]- $\beta$ ,2,3,6-tetramethoxy- $\delta$ -methyl-5-nitro-, methyl ester, ( $\alpha$ S, $\beta$ S, $\delta$ R)- (9CI)  
 MF C34 H43 N O12

Absolute stereochemistry. Rotation (-).



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

ALL ANSWERS HAVE BEEN SCANNED

=> s 17 full

FULL SEARCH INITIATED 13:18:18 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 854936 TO ITERATE

100.0% PROCESSED 854936 ITERATIONS

678 ANSWERS

SEARCH TIME: 00.00.11

L9 678 SEA SSS FUL L7

=> d his

(FILE 'HOME' ENTERED AT 13:12:57 ON 10 JAN 2007)

FILE 'CASREACT' ENTERED AT 13:13:13 ON 10 JAN 2007

L1 STRUCTURE UPLOADED

L2 0 S L1

L3 1 S L1 FULL

FILE 'REGISTRY' ENTERED AT 13:14:17 ON 10 JAN 2007

L4 STRUCTURE UPLOADED

L5 5 S L4

L6 610 S L4 FULL

L7 STRUCTURE UPLOADED

L8 3 S L7

L9 678 S L7 FULL

=> file hcaplus chemcat

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

346.45

460.66

FILE 'HCAPLUS' ENTERED AT 13:18:44 ON 10 JAN 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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FILE 'CHEMCATS' ENTERED AT 13:18:44 ON 10 JAN 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
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=> s 16

L10 957 L6

=> s 19

L11 431 L9

=> s 110 and 111

L12 33 L10 AND L11

=> d 1-33 ibib abs hitstr

L12 ANSWER 1 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:1085200 HCAPLUS

DOCUMENT NUMBER: 145:397958

TITLE: Poly(tetrahydrofuran)/poly(p-dioxanone) triblock copolymer

INVENTOR(S): Wang, Yuzhong; Zhou, Yufang; Yang, Keke; Wang, Xiuli; Chen, Sichong; Zhou, Xi; Ding, Songdong; Wu, Gang

PATENT ASSIGNEE(S): Sichuan University, Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 8pp.  
CODEN: CNXXEV

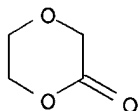
DOCUMENT TYPE: Patent

LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
CN 1844191	A	20061011	CN 2006-10020483	20060314
PRIORITY APPLN. INFO.:			CN 2006-10020483	20060314
AB	Title triblock copolymer with the repetitive structure unit on top of page 2 is prepared by feeding poly(tetrahydrofuran) with mol.wt 500-5000 in reactor, adding catalyst under the protection of inert gas, heating to 60-100°, stirring for 10-50 min, adding p-dioxanone monomer, stirring and reacting at 60-100° for 24-72 h. The obtained triblock copolymer can be used to prepare cyclodextrin clathrate compound, surgical sutures, thin film, sheets, tubes and pipes, plates, foam materials, adhesives, non-woven fabrics degradable materials.			
IT	898539-85-0P 898539-86-1P RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation and application of polytetrahydrofuran/polyp-dioxanone triblock copolymer)			
RN	898539-85-0 HCAPLUS			
CN	1,4-Dioxan-2-one, polymer with tetrahydrofuran, triblock (9CI) (CA INDEX NAME)			
CM	1			
CRN	3041-16-5			
CMF	C4 H6 O3			



CM 2

CRN 109-99-9

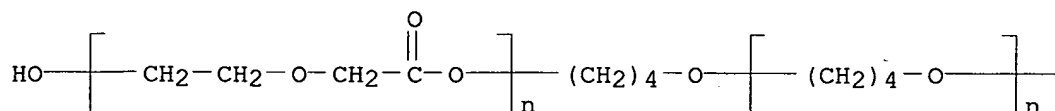
CMF C4 H8 O



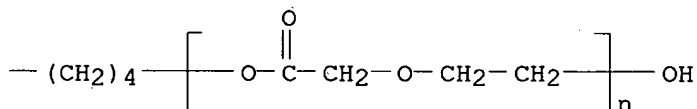
RN 898539-86-1 HCAPLUS

CN Poly[oxy(1-oxo-1,2-ethanediyl)oxy-1,2-ethanediyl],  $\alpha$ -(4-hydroxybutyl)- $\omega$ -hydroxy-,  $\alpha$ -ether with  $\alpha$ -hydro- $\omega$ -hydroxypoly(oxy-1,4-butanediyl) (2:1), triblock (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L12 ANSWER 2 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:922849 HCAPLUS

DOCUMENT NUMBER: 145:471949

TITLE: ABA triblock copolymers from poly(p-dioxanone) and poly(ethylene glycol)

AUTHOR(S): Yang, Ke-Ke; Zheng, Li; Wang, Yu-Zhong; Zeng, Jian-Bing; Wang, Xiu-Li; Chen, Si-Chong; Zeng, Qiang; Li, Bin

CORPORATE SOURCE: Center for Degradable and Flame-Retardant Polymeric Materials, College of Chemistry, Sichuan University, Chengdu, 610064, Peop. Rep. China

SOURCE: Journal of Applied Polymer Science (2006), 102(2), 1092-1097

CODEN: JAPNAB; ISSN: 0021-8995

PUBLISHER: John Wiley & Sons, Inc.

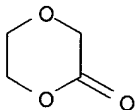
DOCUMENT TYPE: Journal

LANGUAGE: English

AB Poly(p-dioxanone)-poly(ethylene glycol)-poly (p-dioxanone) ABA triblock copolymers (PEDO) were synthesized by ring-opening polymerization from p-dioxanone using poly(ethylene glycol) (PEG) with different mol. wts. as macroinitiators in N<sub>2</sub> atmosphere. The copolymer was characterized by <sup>1</sup>H NMR spectroscopy. The thermal behavior, crystallization, and thermal stability of

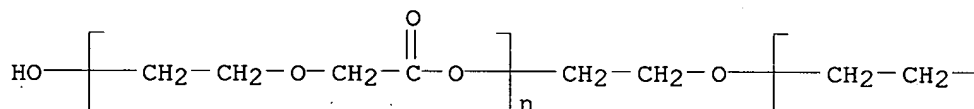
these copolymers were investigated by differential scanning calorimetry and thermogravimetric measurements. The water absorption of these copolymers was also measured. The results indicated that the content and length of PEG chain have a greater effect on the properties of copolymers. This kind of biodegradable copolymer will find a potential application in

biomedical materials.  
 IT 29223-92-5, p-Dioxanone homopolymer  
 RL: PRP (Properties)  
 (synthesis and characterization of polyethylene oxide-initiated  
 p-dioxanone triblock copolymer)  
 RN 29223-92-5 HCAPLUS  
 CN 1,4-Dioxan-2-one, homopolymer (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 3041-16-5  
 CMF C4 H6 O3

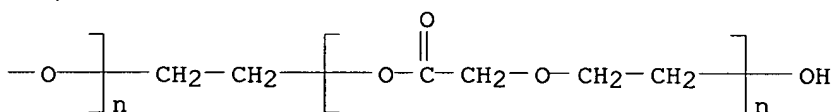


IT 519179-94-3P 837407-65-5P  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (synthesis and characterization of polyethylene oxide-initiated  
 p-dioxanone triblock copolymer)  
 RN 519179-94-3 HCAPLUS  
 CN Poly[oxy(1-oxo-1,2-ethanediyl)oxy-1,2-ethanediyl],  $\alpha$ -(2-  
 hydroxyethyl)- $\omega$ -hydroxy-,  $\alpha, \alpha'$ -ether with  
 $\alpha$ -hydro- $\omega$ -hydroxypoly(oxy-1,2-ethanediyl) (2:1) (9CI) (CA  
 INDEX NAME)

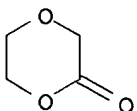
PAGE 1-A



PAGE 1-B



RN 837407-65-5 HCAPLUS  
 CN 1,4-Dioxan-2-one, polymer with oxirane, triblock (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 3041-16-5  
 CMF C4 H6 O3



CM 2

CRN 75-21-8

CMF C2 H4 O



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 3 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:473183 HCAPLUS

DOCUMENT NUMBER: 145:146122

TITLE: Synthesis of block copolymers of poly(p-dioxanone) block poly(tetrahydrofuran)

AUTHOR(S): Zhou, Yu-Fang; Yang, Ke-Ke; Wang, Yu-Zhong; Wang, Xiu-Li

CORPORATE SOURCE: Center for Degradable and Flame-Retardant Polymeric Materials, College of Chemistry, Sichuan University, Chengdu, 610064, Peop. Rep. China

SOURCE: Polymer Bulletin (Heidelberg, Germany) (2006), 57(2), 151-156

CODEN: POBUDR; ISSN: 0170-0839

PUBLISHER: Springer

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The triblock copolymers of poly(p-dioxanone)-b-poly(tetrahydrofuran)-b-poly(p-dioxanone) were synthesized by ring-opening polymerization of p-dioxanone

in the presence of dihydroxyl poly(tetrahydrofuran) (PTHF) using stannous octoate (SnOct2) as a catalyst. The effects of feed ratio, reaction time and reaction temperature on the copolymn. were investigated. It was found that the optimal reaction temperature and time were 80 °C and 42 h, resp., and the molar ratio of p-dioxanone/SnOct2 (PDO/cat.) had little influence on the inherent viscosity of the copolymers. The triblock copolymers were characterized by various anal. techniques such as 1H-NMR and DSC.

IT 898539-85-0P, p-Dioxanone-THF triblock copolymer 898539-86-1P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (synthesis of triblock poly(p-dioxanone)-poly(tetrahydrofuran) copolymer)

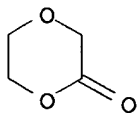
RN 898539-85-0 HCAPLUS

CN 1,4-Dioxan-2-one, polymer with tetrahydrofuran, triblock (9CI) (CA INDEX NAME)

CM 1

CRN 3041-16-5

CMF C4 H6 O3



CM 2

CRN 109-99-9

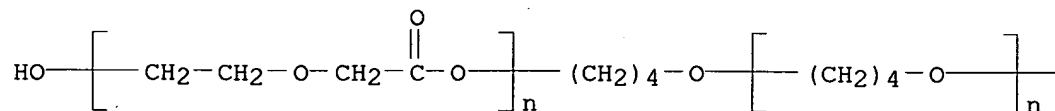
CMF C4 H8 O



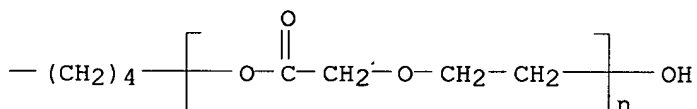
RN 898539-86-1 HCAPLUS

CN Poly[oxy(1-oxo-1,2-ethanediyl)oxy-1,2-ethanediyl],  $\alpha$ -(4-hydroxybutyl)- $\omega$ -hydroxy-,  $\alpha$ -ether with  $\alpha$ -hydro- $\omega$ -hydroxypoly(oxy-1,4-butanediyl) (2:1), triblock (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 4 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:538790 HCAPLUS

DOCUMENT NUMBER: 143:230322

TITLE: Preparation of Hyperbranched Aliphatic Polyester  
Derived from Functionalized 1,4-Dioxan-2-one

AUTHOR(S): Yu, Xiang-Hua; Feng, Jun; Zhuo, Ren-Xi

CORPORATE SOURCE: School of Material Science and Engineering, Wuhan  
Institute of Chemical Technology, and Key Laboratory  
of Biomedical Polymers (The Ministry of Education),  
Department of Chemistry, Wuhan University, Wuhan,  
430072, Peop. Rep. China

SOURCE: Macromolecules (2005), 38(15), 6244-6247

CODEN: MAMOBX; ISSN: 0024-9297

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

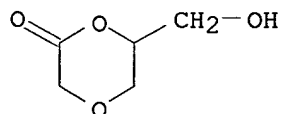
LANGUAGE: English

AB This paper first describes the synthesis of 6-hydroxymethyl-1,4-dioxan-2-one (HDON) designed for the preparation of hyperbranched polymers by self-condensing ring-opening polymerization. A larger number of hydroxyl groups at the side chains of this hyperbranched polyester allow further surface modification and facilitate covalent prodrug attachment.

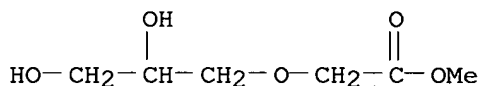
IT 862736-42-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(hyperbranched; synthesis and self-condensing ring-opening polymerization of hydroxymethyldioxanone yielding polyhydroxy-containing hyperbranched aliphatic polyester)

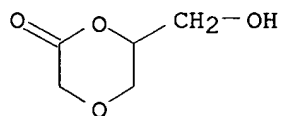
RN 862736-42-3 HCAPLUS  
CN 1,4-Dioxan-2-one, 6-(hydroxymethyl)-, homopolymer (9CI) (CA INDEX NAME)  
CM 1  
CRN 112165-62-5  
CMF C5 H8 O4



IT 862736-43-4P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(model compound; synthesis and self-condensing ring-opening polymerization  
of hydroxymethyldioxanone yielding polyhydroxy-containing hyperbranched  
aliphatic polyester)  
RN 862736-43-4 HCAPLUS  
CN Acetic acid, (2,3-dihydroxypropoxy)-, methyl ester (9CI) (CA INDEX NAME)



IT 112165-62-5P, 6-Hydroxymethyl-1,4-dioxan-2-one  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(synthesis and self-condensing ring-opening polymerization of  
hydroxymethyldioxanone yielding polyhydroxy-containing hyperbranched  
aliphatic polyester)  
RN 112165-62-5 HCAPLUS  
CN 1,4-Dioxan-2-one, 6-(hydroxymethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 5 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2003:758879 HCAPLUS  
DOCUMENT NUMBER: 139:395723  
TITLE: Total Synthesis of (+)-Geldanamycin and  
(-)-o-Quinogeldanamycin: Asymmetric Glycolate Aldol  
Reactions and Biological Evaluation  
AUTHOR(S): Andrus, Merritt B.; Meredith, Erik L.; Hicken, Erik  
J.; Simmons, Bryon L.; Glancey, Russell R.; Ma, Wei  
CORPORATE SOURCE: Department of Chemistry and Biochemistry, Brigham  
Young University, Provo, UT, 84602-5700, USA  
SOURCE: Journal of Organic Chemistry (2003), 68(21), 8162-8169

PUBLISHER:  
DOCUMENT TYPE:  
LANGUAGE:  
OTHER SOURCE(S):  
GI

CODEN: JOCEAH; ISSN: 0022-3263  
American Chemical Society  
Journal  
English  
CASREACT 139:395723

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The total synthesis of (+)-geldanamycin (GA), following a linear route, has been completed using a demethylative quinone-forming reaction as the last step. Key steps include the use of two new asym. boron glycolate aldol reactions. To set the anti-C11,12 hydroxymethoxy functionality, (S,S)-5,6-bis-(4-methoxyphenyl)dioxanone was used. Methylglycolate derived from norephedrine I set the C6,7 methoxyurethane stereochem. The quinone formation step using nitric acid gave the non-natural o-quinone-GA product II 10:1 over geldanamycin. Other known oxidants gave an unusual azaquinone product III. O-Quino-GA II binds Hsp90 with good affinity but is less cytotoxic compared to GA.

IT 326606-11-5P 326606-16-0P 326606-26-2P  
474410-93-0P

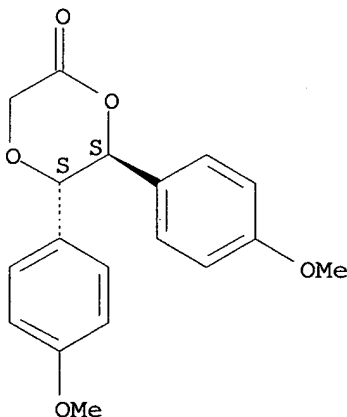
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(total synthesis of (+)-geldanamycin and (-)-ortho-quinogeldanamycin via asym. boron glycolate aldol reactions and their cytotoxicity against SKBr3 human cancer cells)

RN 326606-11-5 HCAPLUS

CN 1,4-Dioxan-2-one, 5,6-bis(4-methoxyphenyl)-, (5S,6S)- (9CI) (CA INDEX NAME)

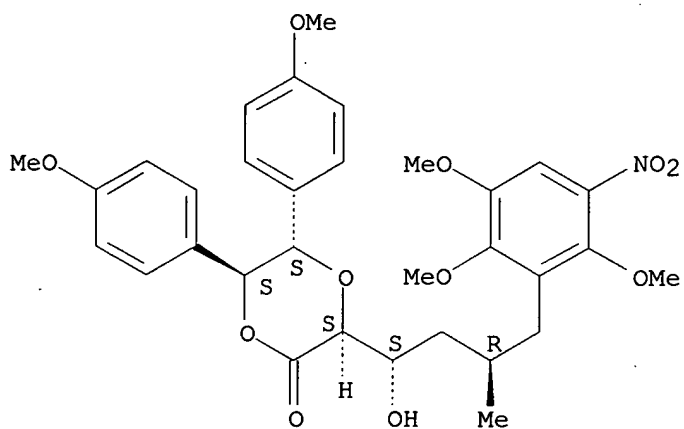
Absolute stereochemistry. Rotation (-).



RN 326606-16-0 HCAPLUS

CN 1,4-Dioxan-2-one, 3-[(1S,3R)-1-hydroxy-3-methyl-4-(2,3,6-trimethoxy-5-nitrophenyl)butyl]-5,6-bis(4-methoxyphenyl)-, (3S,5S,6S)- (9CI) (CA INDEX NAME)

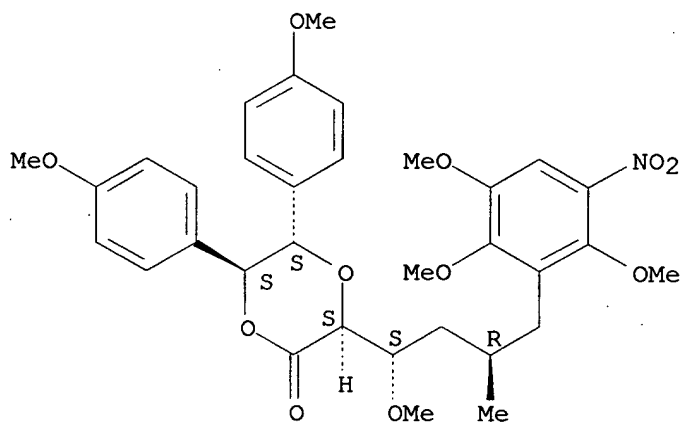
Absolute stereochemistry. Rotation (-).



RN 326606-26-2 HCAPLUS

CN 1,4-Dioxan-2-one, 3-[(1S,3R)-1-methoxy-3-methyl-4-(2,3,6-trimethoxy-5-nitrophenyl)butyl]-5,6-bis(4-methoxyphenyl)-, (3S,5S,6S)- (9CI) (CA INDEX NAME)

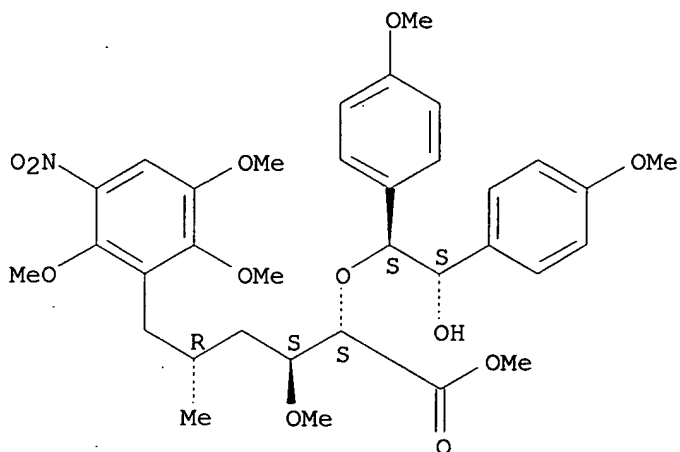
Absolute stereochemistry. Rotation (-).



RN 474410-93-0 HCAPLUS

CN Benzenehexanoic acid,  $\alpha$ -[(1S,2S)-2-hydroxy-1,2-bis(4-methoxyphenyl)ethoxy]- $\beta$ ,2,3,6-tetramethoxy- $\delta$ -methyl-5-nitro-, methyl ester, ( $\alpha$ S, $\beta$ S, $\delta$ R)- (9CI) (CA INDEX NAME)

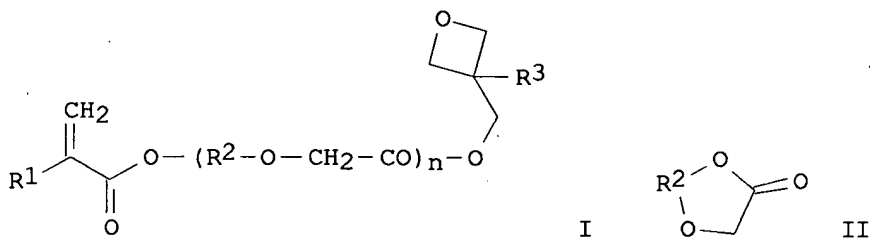
Absolute stereochemistry. Rotation (-).



REFERENCE COUNT: 78 THERE ARE 78 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 6 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2003:368907 HCAPLUS  
 DOCUMENT NUMBER: 138:369365  
 TITLE: Oxetane-containing (meth)acrylate esters, their manufacture, and their use as dental monomers and monomers for grafting polyolefins  
 INVENTOR(S): Miyazaki, Kazuhisa; Ota, Seiji; Akie, Hideyuki  
 PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003137878	A	20030514	JP 2001-332394	20011030
PRIORITY APPLN. INFO.:			JP 2001-332394	20011030
OTHER SOURCE(S):	MARPAT 138:369365			
GI				



AB Title esters I [R1 = H, Me; R2 = (ether bond-containing) linear or branched alkylene; R3 = linear alkyl; n = 1-4], useful for coatings and adhesives as well, are manufactured by ring-cleavage esterification of lactones II (R2 = same as above) with 3-alkyl-3-hydroxymethyloxetane in the presence of base catalysts, followed by esterification of the resulting products with (meth)acryloyl halide. Thus, 1,4-dioxan-2-one was reacted with 3-ethyl-3-hydroxymethyloxetane in the presence of K2CO3 to give 28%

3-ethyl-3-oxetanylmethyl 2-hydroxyethoxyacetate, which was esterified with acryloyl chloride to give 40% 3-ethyl-3-oxetanylmethyl 2-acryloxyethoxyacetate.

IT 524067-99-0P

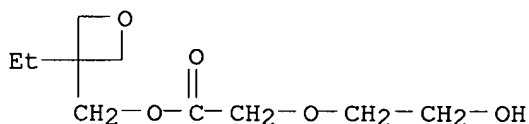
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(manufacture of oxetane-containing (meth)acrylate esters for dental materials,

coatings, adhesives, and grafting of polyolefins)

RN 524067-99-0 HCAPLUS

CN Acetic acid, (2-hydroxyethoxy)-, (3-ethyl-3-oxetanylmethyl ester (9CI) (CA INDEX NAME)



IT 3041-16-5, 1,4-Dioxan-2-one

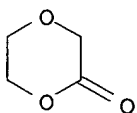
RL: RCT (Reactant); RACT (Reactant or reagent)

(manufacture of oxetane-containing (meth)acrylate esters for dental materials,

coatings, adhesives, and grafting of polyolefins)

RN 3041-16-5 HCAPLUS

CN 1,4-Dioxan-2-one (9CI) (CA INDEX NAME)



L12 ANSWER 7 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:134330 HCAPLUS

DOCUMENT NUMBER: 138:354347

TITLE: Synthesis and characterization of ABA type tri-block copolymers derived from p-dioxanone, L-lactide and poly(ethylene glycol)

AUTHOR(S): Bhattarai, Narayan; Kim, Hak Yong; Lee, Douk Rae; Park, Soo-Jin

CORPORATE SOURCE: Department of Advanced Organic Materials Engineering, Chonbuk National University, Chon-ju, 561-756, S. Korea

SOURCE: Polymer International (2003), 52(1), 6-14  
CODEN: PLYIEI; ISSN: 0959-8103

PUBLISHER: John Wiley & Sons Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A series of triblock co-polymers, consisting of a poly(ethylene glycol) (PEG) central block joined to 2 blocks of random p-dioxanone-co-L-lactide copolymers were synthesized by ring-opening polymerization of p-dioxanone (PDO) and L-lactide (LLA) initiated by PEG in the presence of stannous 2-ethylhexanoate catalyst. The resulting copolymers were characterized by various techniques including 1H and 13C NMR and FTIR spectroscopies, gel permeation chromatog., inherent viscosity, wide-angle x-ray diffractometry (WAXD), and differential scanning calorimetry (DSC). The conversion of PDO and L-lactide into the polymer was studied various mole ratios and at different polymerization temperature from 1H NMR spectra. Results of WAXD and

DSC

showed that the crystallinity of PEG macroinitiator was greatly influenced by the composition of PDO and L-lactide in the copolymer. The triblock copolymers with low mol. weight were soluble in water at below room temperature

IT 110122-20-8P, p-Dioxanone-L-lactide copolymer 205379-45-9P

, p-Dioxanone-ethylene oxide block copolymer 519179-94-3P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)

(preparation and characterization of poly(ethylene glycol)-(lactide-co-dioxanone) triblock polymer in relation to)

RN 110122-20-8 HCAPLUS

CN 1,4-Dioxane-2,5-dione, 3,6-dimethyl-, (3S,6S)-, polymer with

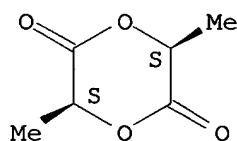
1,4-dioxan-2-one (9CI) (CA INDEX NAME)

CM 1

CRN 4511-42-6

CMF C6 H8 O4

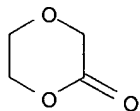
Absolute stereochemistry.



CM 2

CRN 3041-16-5

CMF C4 H6 O3



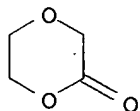
RN 205379-45-9 HCAPLUS

CN 1,4-Dioxan-2-one, polymer with oxirane, block (9CI) (CA INDEX NAME)

CM 1

CRN 3041-16-5

CMF C4 H6 O3



CM 2

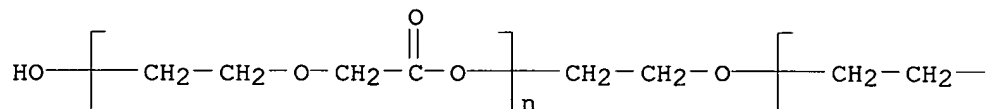
CRN 75-21-8

CMF C2 H4 O

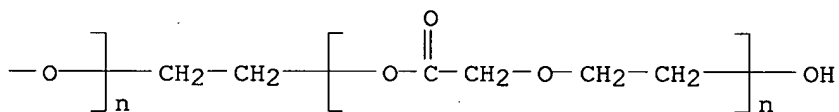


RN 519179-94-3 HCAPLUS  
 CN Poly[oxy(1-oxo-1,2-ethanediyl)oxy-1,2-ethanediyl],  $\alpha$ -(2-hydroxyethyl)- $\omega$ -hydroxy-,  $\alpha,\alpha'$ -ether with  $\alpha$ -hydro- $\omega$ -hydroxypoly(oxy-1,2-ethanediyl) (2:1) (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



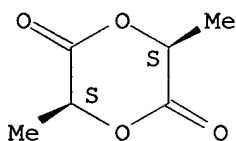
IT 519179-93-2P, p-Dioxanone-ethylene oxide-L-lactide block copolymer  
 842138-24-3P  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (triblock; preparation and characterization of poly(ethylene glycol)-(lactide-co-dioxanone) triblock polymer)  
 RN 519179-93-2 HCAPLUS  
 CN 1,4-Dioxane-2,5-dione, 3,6-dimethyl-, (3S,6S)-, polymer with 1,4-dioxan-2-one and oxirane, block (9CI) (CA INDEX NAME)

CM 1

CRN 4511-42-6

CMF C6 H8 O4

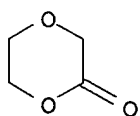
Absolute stereochemistry.



CM 2

CRN 3041-16-5

CMF C4 H6 O3



CM 3

CRN 75-21-8

CMF C2 H4 O



RN 842138-24-3 HCAPLUS

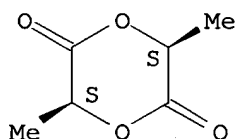
CN 1,4-Dioxane-2,5-dione, 3,6-dimethyl-, (3S,6S)-, polymer with  
1,4-dioxan-2-one and oxirane, triblock (9CI) (CA INDEX NAME)

CM 1

CRN 4511-42-6

CMF C6 H8 O4

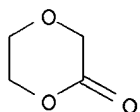
Absolute stereochemistry.



CM 2

CRN 3041-16-5

CMF C4 H6 O3



CM 3

CRN 75-21-8

CMF C2 H4 O



REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 8 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:806282 HCAPLUS

DOCUMENT NUMBER: 138:81040

TITLE: Synthesis and liquid crystalline properties of  
5-alkyl-1,4-dioxane-2-carboxylic esters

AUTHOR(S): Braun, Manfred; Spieker, Birgit; Hahn, Antje; Vill,

CORPORATE SOURCE: Volkmar  
 Institut für Organische Chemie und Makromolekulare  
 Chemie, Universität Düsseldorf, Düsseldorf, 40225,  
 Germany  
 SOURCE: Synthesis (2002), (14), 2129-2137  
 CODEN: SYNTBF; ISSN: 0039-7881  
 PUBLISHER: Georg Thieme Verlag  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB The 1st route to 5-alkyl substituted and purely trans-configured  
 1,4-dioxanecarboxylic acids is described. The mesogenic properties of the  
 esters were studied and compared. An enantioselective route to  
 1,4-dioxanecarboxylic acid is explained, and takes advantage of the  
 stereoselective addition of the bromolithioalkene to heptanal.

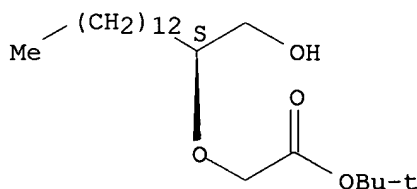
IT 481635-97-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and cyclization of)

RN 481635-97-6 HCAPLUS

CN Acetic acid, [[(1S)-1-(hydroxymethyl)tetradecyl]oxy]-, 1,1-dimethylethyl  
 ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

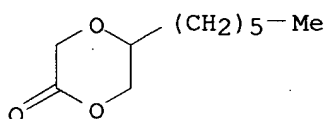


IT 93691-78-2P 481635-85-2P 481635-98-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and reduction of)

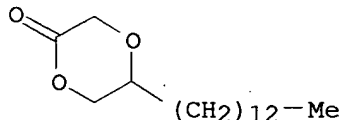
RN 93691-78-2 HCAPLUS

CN 1,4-Dioxan-2-one, 5-hexyl- (9CI) (CA INDEX NAME)



RN 481635-85-2 HCAPLUS

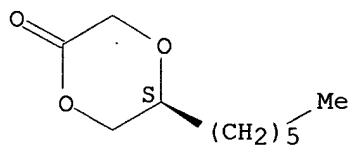
CN 1,4-Dioxan-2-one, 5-tridecyl- (9CI) (CA INDEX NAME)



RN 481635-98-7 HCAPLUS

CN 1,4-Dioxan-2-one, 5-hexyl-, (5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 9 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:685468 HCAPLUS

DOCUMENT NUMBER: 137:352802

TITLE: Total Synthesis of (+)-Geldanamycin and (-)-o-Quinogeldanamycin with Use of Asymmetric Anti- and Syn-Glycolate Aldol Reactions

AUTHOR(S): Andrus, Merritt B.; Meredith, Erik L.; Simmons, Bryon L.; Sekhar, B. B. V. Soma; Hicken, Erik J.

CORPORATE SOURCE: Department of Chemistry and Biochemistry, Brigham Young University, Provo, UT, 84602-5700, USA

SOURCE: Organic Letters (2002), 4(20), 3549-3552

CODEN: ORLEF7; ISSN: 1523-7060

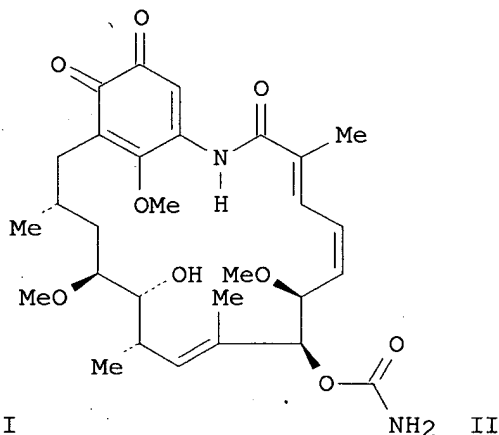
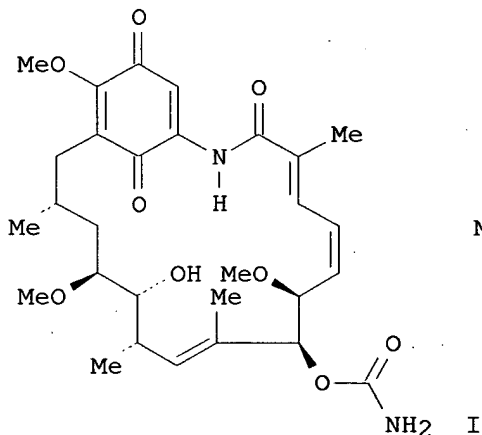
PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 137:352802

GI



AB Geldanamycin (GA, I), an antitumor Hsp90 inhibitor, was made for the first time by using an oxidative demethylation reaction as the final step. A biaryldioxanone auxiliary set the anti C11-12 hydroxy-methoxy functionality and a methylglycolate auxiliary based on norephedrine was used for the syn C6-7 methoxy-urethane. P-Quinone-forming oxidants, CAN and AgO, produced an unusual aza-quinone product. Nitric acid gave GA from a trimethoxy precursor in 55% yield as a 1:10 mixture with non-natural o-quinog-GA, II.

IT 326606-11-5P 326606-16-0P 326606-26-2P

474410-93-0P

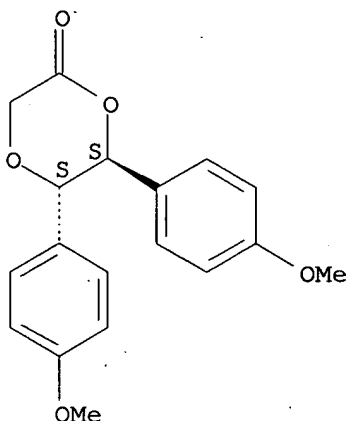
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(total synthesis of (+)-geldanamycin and (-)-o-quinogeldanamycin with use of asym. anti- and syn-glycolate aldol reactions)

RN 326606-11-5 HCAPLUS

CN 1,4-Dioxan-2-one, 5,6-bis(4-methoxyphenyl)-, (5S,6S)- (9CI) (CA INDEX NAME)

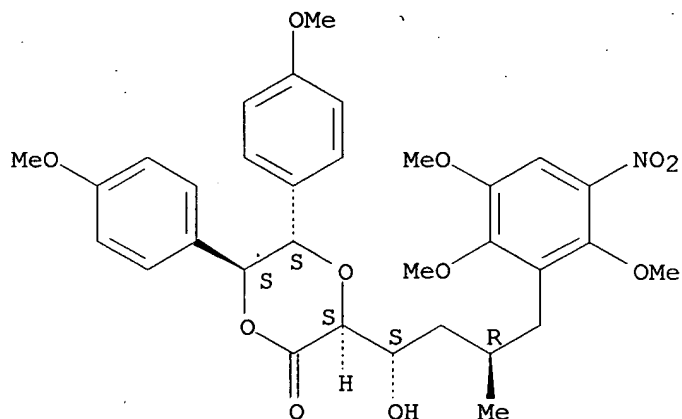
Absolute stereochemistry. Rotation (-).



RN 326606-16-0 HCAPLUS

CN 1,4-Dioxan-2-one, 3-[(1S,3R)-1-hydroxy-3-methyl-4-(2,3,6-trimethoxy-5-nitrophenyl)butyl]-5,6-bis(4-methoxyphenyl)-, (3S,5S,6S)- (9CI) (CA INDEX NAME)

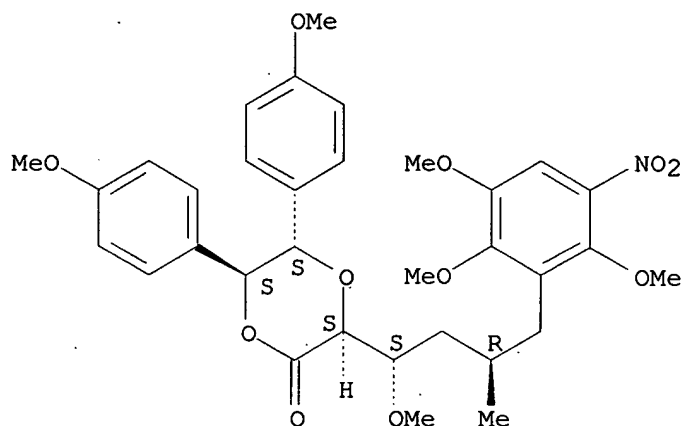
Absolute stereochemistry. Rotation (-).



RN 326606-26-2 HCAPLUS

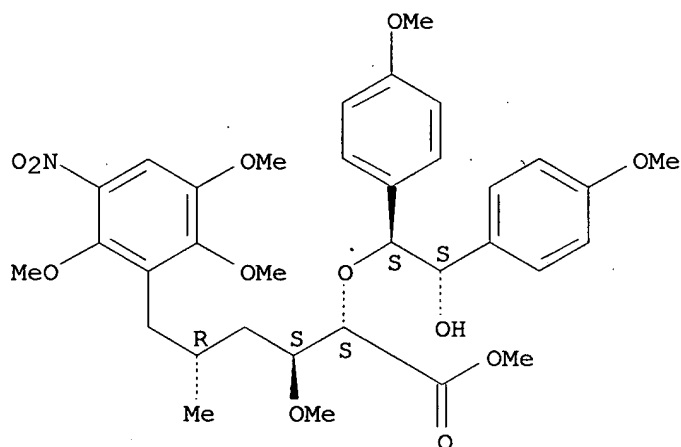
CN 1,4-Dioxan-2-one, 3-[(1S,3R)-1-methoxy-3-methyl-4-(2,3,6-trimethoxy-5-nitrophenyl)butyl]-5,6-bis(4-methoxyphenyl)-, (3S,5S,6S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 474410-93-0 HCAPLUS  
 CN Benzenehexanoic acid,  $\alpha$ -[(1S,2S)-2-hydroxy-1,2-bis(4-methoxyphenyl)ethoxy]- $\beta$ ,2,3,6-tetramethoxy- $\delta$ -methyl-5-nitro-, methyl ester, ( $\alpha$ S, $\beta$ S, $\delta$ R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 10 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:469745 HCAPLUS

DOCUMENT NUMBER: 137:384798

TITLE: Efficient synthesis and hydrolysis of cyclic oxalate esters of glycols

AUTHOR(S): Itaya, Taisuke; Iida, Takehiko; Gomyo, Yasuko; Natsutani, Itaru; Ohba, Masashi

CORPORATE SOURCE: Faculty of Pharmaceutical Sciences, Kanazawa University, Kanazawa, 920-0934, Japan

SOURCE: Chemical & Pharmaceutical Bulletin (2002), 50(3), 346-353

CODEN: CPBTAL; ISSN: 0009-2363

PUBLISHER: Pharmaceutical Society of Japan

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 137:384798

AB Based on the mechanism postulated for the formation of the cyclic

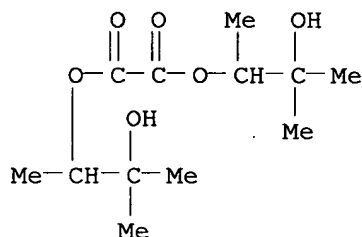
carbonates in the reactions of glycols with oxalyl chloride in the presence of triethylamine, three efficient syntheses of the cyclic oxalates of various glycols by controlling the formation of cyclic oxalates are presented. Replacement of the base by pyridine markedly diminished yields of cyclic oxalates in all reactions, realizing dramatic reversals of the product ratios in the reactions with the (R\*,R\*)-comps. Although considerable amts. of the oxalate polymers were formed in the reactions with some (R\*,S\*)-glycols, this drawback can be removed by the use of 2,4,6-collidine instead of pyridine. 1,1'-Oxalyldiimidazole was useful for the synthesis of two selected cyclic oxalates. Some of the cyclic oxalates other than trisubstituted and tetrasubstituted ones were found to be very reactive: kinetic studies on the hydrolysis of 1,4-dioxane-2,3-dione as well as its mono- and some selected 5,6-disubstituted derivs. revealed that they undergo hydrolysis 260-1500 times more rapidly than di-Et oxalate in acetate buffer-acetonitrile (pH 5.69) at 25°. Although the cyclic oxalate from cis-1,2-cyclopentanediol was 1.5 times more reactive than others, it has been shown with other substrates that increasing number of the alkyl substituents decreases the rate of hydrolysis. On the contrary, the Ph group was found to have somewhat accelerative effect.

IT 476213-95-3P

RL: BYP (Byproduct); PREP (Preparation)  
(efficient synthesis and hydrolysis of cyclic oxalate esters of glycols)

RN 476213-95-3 HCAPLUS

CN Ethanedioic acid, bis(2-hydroxy-1,2-dimethylpropyl) ester (9CI) (CA INDEX NAME)

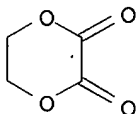


IT 3524-70-7P, 1,4-Dioxane-2,3-dione 74888-54-3P  
149302-73-8P 149302-74-9P 149302-75-0P  
149302-76-1P 149302-84-1P 155244-01-2P  
476213-91-9P

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(efficient synthesis and hydrolysis of cyclic oxalate esters of glycols)

RN 3524-70-7 HCAPLUS

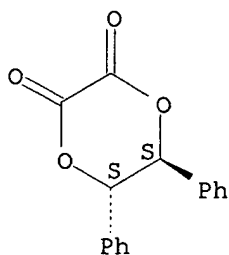
CN 1,4-Dioxane-2,3-dione (9CI) (CA INDEX NAME)



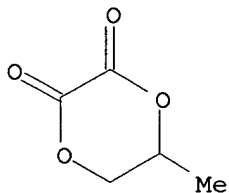
RN 74888-54-3 HCAPLUS

CN 1,4-Dioxane-2,3-dione, 5,6-diphenyl-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

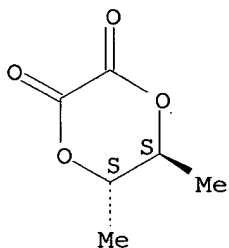


RN 149302-73-8 HCAPLUS  
 CN 1,4-Dioxane-2,3-dione, 5-methyl- (9CI) (CA INDEX NAME)

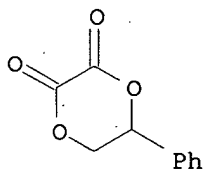


RN 149302-74-9 HCAPLUS  
 CN 1,4-Dioxane-2,3-dione, 5,6-dimethyl-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

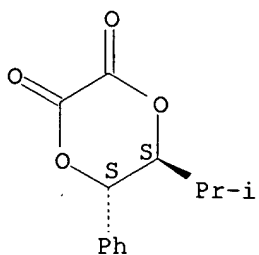


RN 149302-75-0 HCAPLUS  
 CN 1,4-Dioxane-2,3-dione, 5-phenyl- (9CI) (CA INDEX NAME)



RN 149302-76-1 HCAPLUS  
 CN 1,4-Dioxane-2,3-dione, 5-(1-methylethyl)-6-phenyl-, trans- (9CI) (CA INDEX NAME)

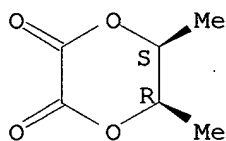
Relative stereochemistry.



RN 149302-84-1 HCAPLUS

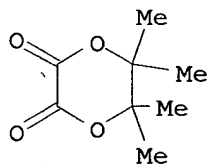
CN 1,4-Dioxane-2,3-dione, 5,6-dimethyl-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.



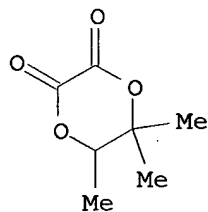
RN 155244-01-2 HCAPLUS

CN 1,4-Dioxane-2,3-dione, 5,5,6,6-tetramethyl- (9CI) (CA INDEX NAME)



RN 476213-91-9 HCAPLUS

CN 1,4-Dioxane-2,3-dione, 5,5,6-trimethyl- (9CI) (CA INDEX NAME)



IT 74888-53-2P 155244-03-4P

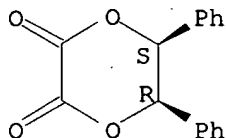
RL: SPN (Synthetic preparation); PREP (Preparation)

(efficient synthesis and hydrolysis of cyclic oxalate esters of glycols)

RN 74888-53-2 HCAPLUS

CN 1,4-Dioxane-2,3-dione, 5,6-diphenyl-, cis- (9CI) (CA INDEX NAME)

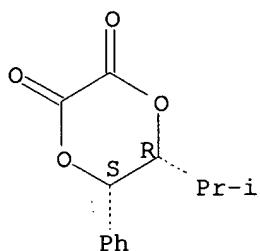
Relative stereochemistry.



RN 155244-03-4 HCAPLUS

CN 1,4-Dioxane-2,3-dione, 5-(1-methylethyl)-6-phenyl-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 11 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:136843 HCAPLUS

DOCUMENT NUMBER: 137:169466

TITLE: Glycolate aldol reactions with boron enolates of bis-4-methoxyphenyldioxanone

AUTHOR(S): Andrus, Merritt B.; Mendenhall, Kris G.; Meredith, Erik L.; Soma Sekhar, B. B. V.

CORPORATE SOURCE: Department of Chemistry and Biochemistry, C100 BNSN, Brigham Young University, Provo, UT, 84602-5700, USA

SOURCE: Tetrahedron Letters (2002), 43(10), 1789-1792

CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 137:169466

AB The boron enolate of 5S,6S-bis(4-methoxyphenyl)-2-dioxanone reacted with various aldehydes to produce anti glycolate aldol products in high yield with good selectivity. The outcome is consistent with an E-enolate reacting through a closed transition state. The adducts were protected and the auxiliary was conveniently removed with ceric ammonium nitrate to give protected dihydroxy acids which are useful intermediates.

IT 448293-90-1P

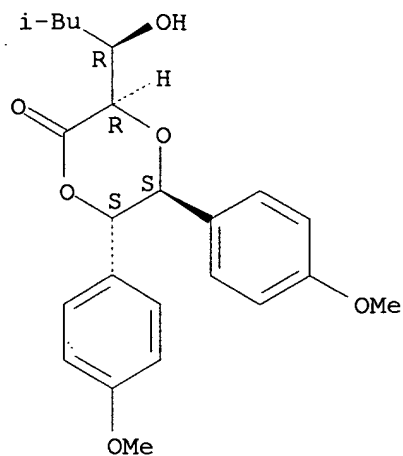
RL: BYP (Byproduct); PREP (Preparation)

(preparation and stereoselective aldol reactions of 5S,6S-bis(4-methoxyphenyl)-2-dioxanone)

RN 448293-90-1 HCAPLUS

CN 1,4-Dioxan-2-one, 3-[(1R)-1-hydroxy-3-methylbutyl]-5,6-bis(4-methoxyphenyl)-, (3R,5S,6S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



IT 326606-11-5P 448293-78-5P 448293-80-9P  
 448293-84-3P 448293-92-3P 448293-94-5P  
 448293-96-7P 448293-98-9P 448294-00-6P  
 448294-02-8P

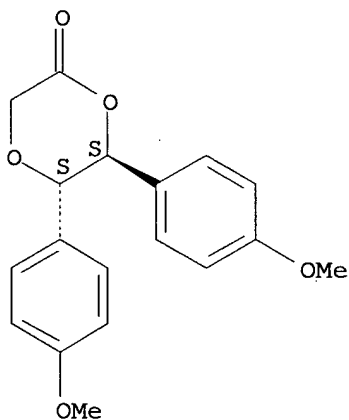
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and stereoselective aldol reactions of 5S,6S-bis(4-methoxyphenyl)-2-dioxanone)

RN 326606-11-5 HCAPLUS

CN 1,4-Dioxan-2-one, 5,6-bis(4-methoxyphenyl)-, (5S,6S)- (9CI) (CA INDEX NAME)

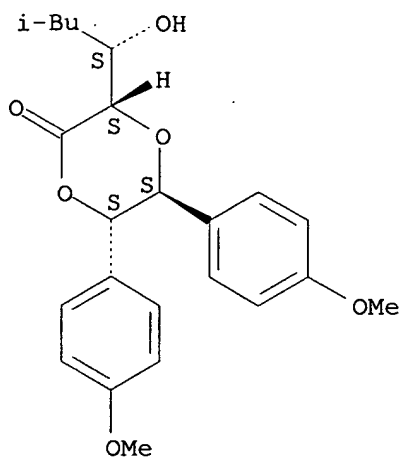
Absolute stereochemistry. Rotation (-).



RN 448293-78-5 HCAPLUS

CN 1,4-Dioxan-2-one, 3-[(1S)-1-hydroxy-3-methylbutyl]-5,6-bis(4-methoxyphenyl)-, (3S,5S,6S)- (9CI) (CA INDEX NAME)

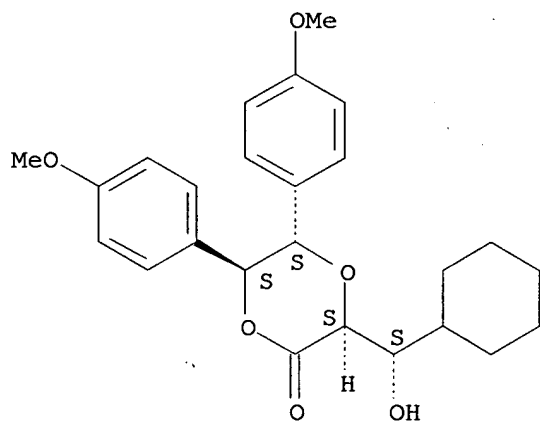
Absolute stereochemistry. Rotation (-).



RN 448293-80-9 HCAPLUS

CN 1,4-Dioxan-2-one, 3-[(S)-cyclohexylhydroxymethyl]-5,6-bis(4-methoxyphenyl)-, (3S,5S,6S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

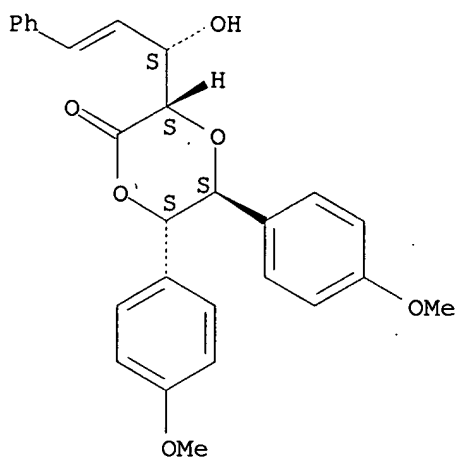


RN 448293-84-3 HCAPLUS

CN L-erythro-Pent-4-enonic acid, 1,2-O-[(1S,2S)-1,2-bis(4-methoxyphenyl)-1,2-ethanediyl]-4,5-dideoxy-5-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

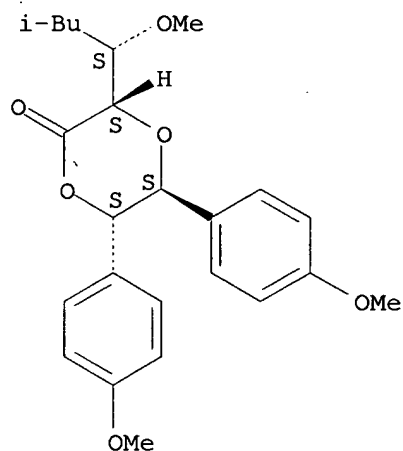
Double bond geometry unknown.



RN 448293-92-3 HCAPLUS

CN 1,4-Dioxan-2-one, 3-[(1S)-1-methoxy-3-methylbutyl]-5,6-bis(4-methoxyphenyl)-, (3S,5S,6S)- (9CI) (CA INDEX NAME)

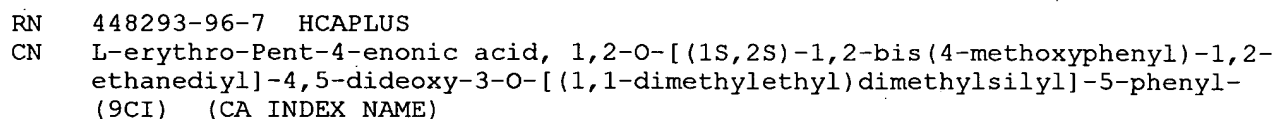
Absolute stereochemistry.



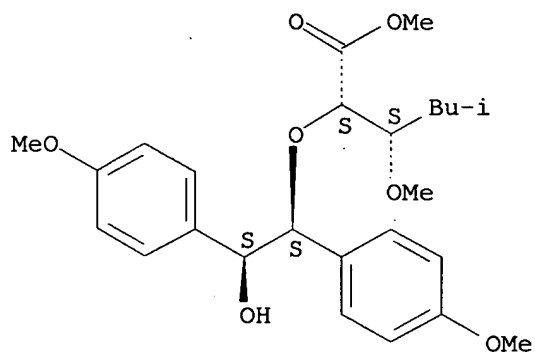
RN 448293-94-5 HCAPLUS

CN 1,4-Dioxan-2-one, 3-[(S)-cyclohexyl[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-5,6-bis(4-methoxyphenyl)-, (3S,5S,6S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



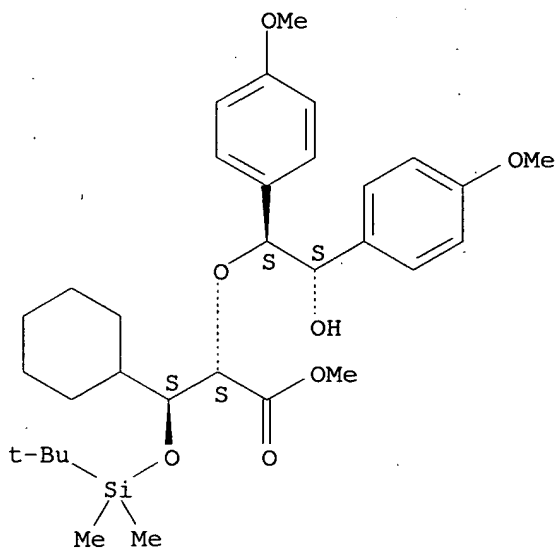
Absolute stereochemistry.



RN 448294-00-6 HCAPLUS

CN Cyclohexanepropanoic acid,  $\beta$ -[[[1,1-dimethylethyl)dimethylsilyl]oxy]- $\alpha$ -[(1S,2S)-2-hydroxy-1,2-bis(4-methoxyphenyl)ethoxy]-, methyl ester, ( $\alpha$ S, $\beta$ S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

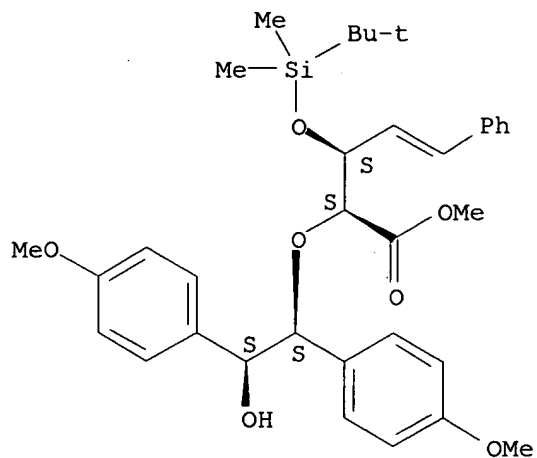


RN 448294-02-8 HCAPLUS

CN L-erythro-Pent-4-enonic acid, 4,5-dideoxy-3-O-[(1,1-dimethylethyl)dimethylsilyl]-2-O-[(1S,2S)-2-hydroxy-1,2-bis(4-methoxyphenyl)ethyl]-5-phenyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.



IT 448293-76-3P 448293-82-1P 448293-86-5P

448293-88-7P 448294-10-8P

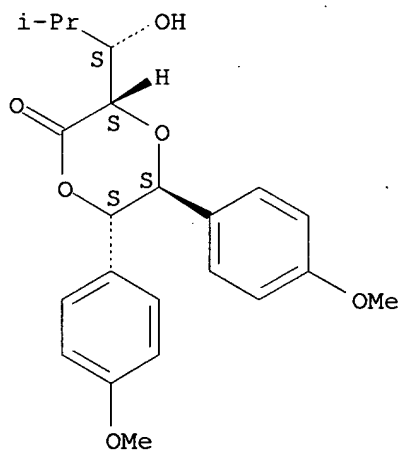
RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and stereoselective aldol reactions of 5S,6S-bis(4-methoxyphenyl)-2-dioxanone)

RN 448293-76-3 HCAPLUS

CN L-erythro-Pentonic acid, 1,2-O-[(1S,2S)-1,2-bis(4-methoxyphenyl)-1,2-ethanediyl]-4,5-dideoxy-4-methyl- (9CI) (CA INDEX NAME)

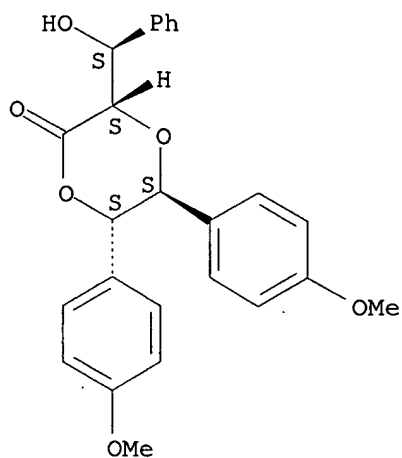
Absolute stereochemistry.



RN 448293-82-1 HCAPLUS

CN 1,4-Dioxan-2-one, 3-[(S)-hydroxyphenylmethyl]-5,6-bis(4-methoxyphenyl)-, (3S,5S,6S)- (9CI) (CA INDEX NAME)

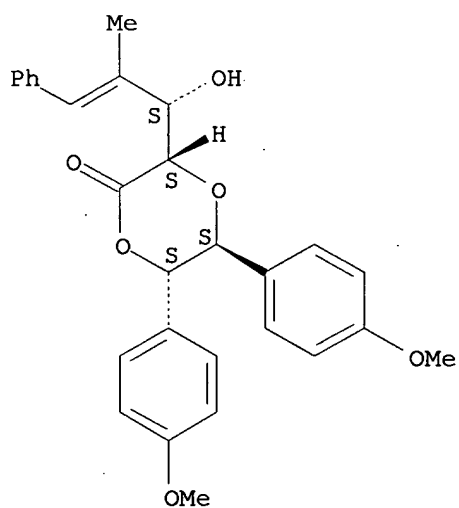
Absolute stereochemistry.



RN 448293-86-5 HCAPLUS

CN L-erythro-Pent-4-enonic acid, 1,2-O-[(1S,2S)-1,2-bis(4-methoxyphenyl)-1,2-ethanediyl]-4,5-dideoxy-4-methyl-5-phenyl- (9CI) (CA INDEX NAME)

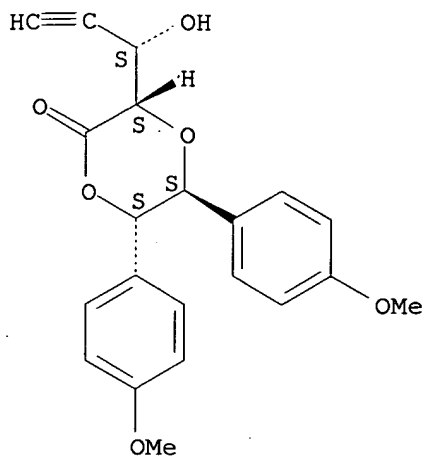
Absolute stereochemistry.  
Double bond geometry unknown.



RN 448293-88-7 HCAPLUS

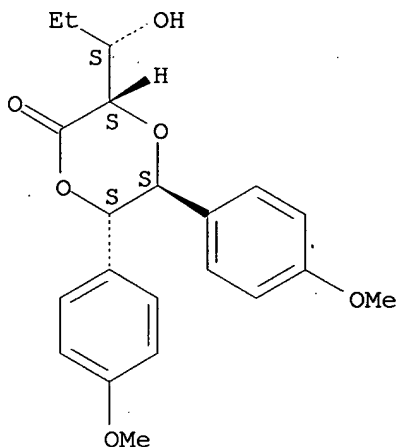
CN L-erythro-Pent-4-ynonic acid, 1,2-O-[(1S,2S)-1,2-bis(4-methoxyphenyl)-1,2-ethanediyl]-4,5-dideoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 448294-10-8 HCAPLUS  
 CN L-erythro-Pentonic acid, 1,2-O-[(1S,2S)-1,2-bis(4-methoxyphenyl)-1,2-ethanediyl]-4,5-dideoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 12 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2001:885853 HCAPLUS  
 DOCUMENT NUMBER: 136:25147  
 TITLE: Shape memory thermoplastics and polymer networks for tissue engineering  
 INVENTOR(S): Lendlein, Andreas; Knischka, Ralf; Kratz, Karl  
 PATENT ASSIGNEE(S): Mnemoscience Gmbh, Germany  
 SOURCE: PCT Int. Appl., 47 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001091822	A1	20011206	WO 2001-EP6210	20010531

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA 2410637 A1 20011206 CA 2001-2410637 20010531  
 EP 1284756 A1 20030226 EP 2001-938245 20010531  
 EP 1284756 B1 20040915

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

AT 275986 T 20041015 AT 2001-938245 20010531  
 ES 2230318 T3 20050501 ES 2001-1938245 20010531  
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PRIORITY APPLN. INFO.: US 2000-208285P P 20000531  
 WO 2001-EP6210 W 20010531

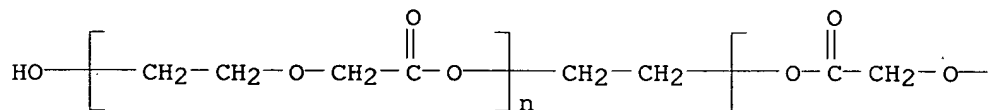
AB Methods and compns. are described herein for reconstruction of different functional tissues. Dissociated cells, differentiated cells, adult mesenchymal stem cells or embryonic stem cells are seeded on a scaffold. The scaffold will consist of a biocompatible, biodegradable shape memory ("SM") polymers. In addition bioactive substances may be incorporated in the scaffold. Thermoplastic as well as thermoset materials with SM-effect can be used. The shape memory effect will be applied as an interactive link between the cells and the used polymeric scaffold. The degradation kinetics as well as shape memory transition temperature will be tailored by adjusting to monomer ratios of the co-oligomers. The shape memory effect will be used to create a degradation or release of bioactive substances on demand, induce forces on seeded cells or induce proliferation and differentiation of cells. For example, a polymer network was prepared from a mixture of poly( $\epsilon$ -caprolactone) dimethacrylate and a proper amount of Bu acrylate by heating to 10° above the melting temperature and photocuring.

IT 377730-22-8P 377733-18-1P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (biodegradable shape memory thermoplastics and polymer networks for tissue engineering)

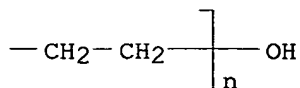
RN 377730-22-8 HCAPLUS

CN Poly[oxy(1-oxo-1,2-ethanediyl)oxy-1,2-ethanediyl],  $\alpha,\alpha'$ -1,2-ethanediylbis[ $\omega$ -hydroxy- (9CI) (CA INDEX NAME)]

PAGE 1-A



PAGE 1-B



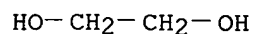
RN 377733-18-1 HCAPLUS

CN 1,4-Dioxan-2-one, homopolymer, ester with 1,2-ethanediol (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 107-21-1

CMF C2 H6 O2



CM 2

CRN 29223-92-5

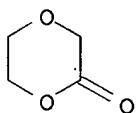
CMF (C4 H6 O3)x

CCI PMS

CM 3

CRN 3041-16-5

CMF C4 H6 O3



IT 377733-20-5P

RI: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(multiblock; biodegradable shape memory thermoplastics and polymer networks for tissue engineering)

RN 377733-20-5 HCAPLUS

CN 1,4-Dioxane-2,5-dione, 3,6-dimethyl-, (3S,6S)-, polymer with 1,6-diisocyanato-2,2,4(or 2,4,4)-trimethylhexane, 1,4-dioxane-2,5-dione,  $\alpha,\alpha'$ -1,2-ethanediylbis[ $\omega$ -hydroxypoly[oxy(1-oxo-1,2-ethanediyl)oxy-1,2-ethanediyl]] and  $\alpha,\alpha'$ -1,2-ethanediylbis[ $\omega$ -hydroxypoly[oxy(1-oxo-1,6-hexanediyl)]]], block (9CI)  
(CA INDEX NAME)

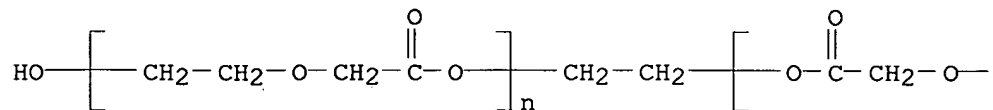
CM 1

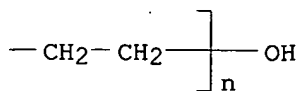
CRN 377730-22-8

CMF (C4 H6 O3)n (C4 H6 O3)n C2 H6 O2

CCI PMS

PAGE 1-A



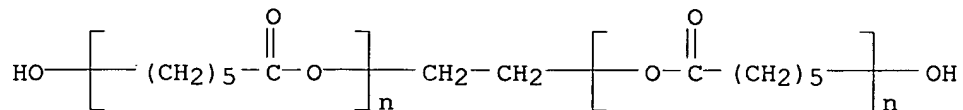


CM 2

CRN 59692-54-5

CMF (C6 H10 O2)<sub>n</sub> (C6 H10 O2)<sub>n</sub> C2 H6 O2

CCI PMS

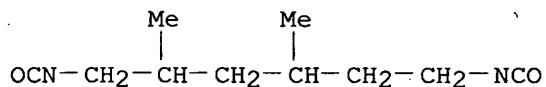


CM 3

CRN 32052-51-0

CMF C11 H18 N2 O2

CCI IDS



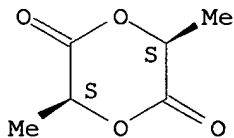
Dl-Me

CM 4

CRN 4511-42-6

CMF C6 H8 O4

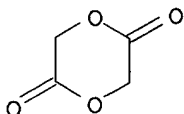
Absolute stereochemistry.



CM 5

CRN 502-97-6

CMF C4 H4 O4



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 13 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:111826 HCAPLUS

DOCUMENT NUMBER: 132:293750

TITLE: Synthesis and Study of C3-Symmetric Hydropyran Cyclooligolides with Oriented Aryl and Alcohol Appendages at 10 Å Spacing

AUTHOR(S): Burke, Steven D.; Zhao, Qian

CORPORATE SOURCE: Department of Chemistry, University of Wisconsin-Madison, Madison, WI, 53706-1396, USA

SOURCE: Journal of Organic Chemistry (2000), 65(5), 1489-1500  
CODEN: JOCEAH; ISSN: 0022-3263

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 132:293750

AB Modular syntheses of C3-sym. macrocycles with pendant aryl and hydroxymethyl groups are described. These functional groups, amenable to further elaboration, were installed early in each synthesis and carried through an iterative sequence of module coupling and macrolactonization. Association consts. for the macrolides with alkali metal cation guests were determined, and sandwich-type complexes with Ba<sup>2+</sup> were confirmed for these macrocycles based on <sup>1</sup>H NMR studies, including Job plots. X-ray crystallog. data for the macrolides were obtained and are discussed in detail. These data provide support that the macrolides are structurally well-defined and preorganized for binding the potassium cation. Preparation of the tris(bromoacetylated) macrotriolide exemplifies a functionalized platform suitable for elaboration with peptide or carbohydrate residues.

IT 264132-24-3P 264132-25-4P 264132-27-6P  
264132-39-0P

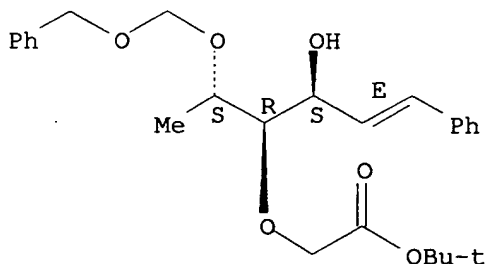
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and complexation of C3-sym. hydropyran cyclooligolides with oriented aryl and alc. appendages at 10 Å spacing)

RN 264132-24-3 HCAPLUS

CN Acetic acid, [[(1R,2S,3E)-2-hydroxy-4-phenyl-1-[(1S)-1-[(phenylmethoxy)methoxy]ethyl]-3-butenyl]oxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

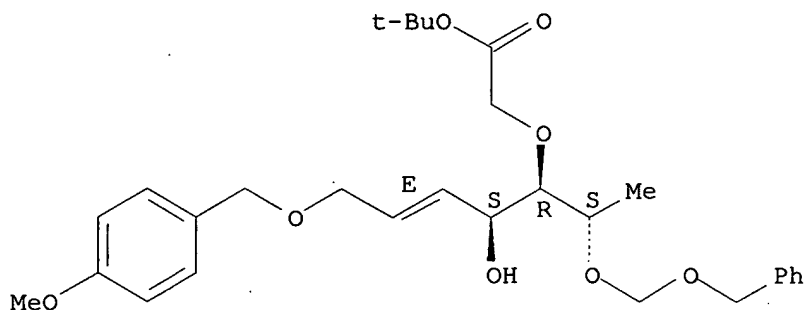
Absolute stereochemistry. Rotation (+).  
Double bond geometry as shown.



RN 264132-25-4 HCAPLUS

CN L-arabino-Hept-2-enitol, 2,3,7-trideoxy-5-O-[2-(1,1-dimethylethoxy)-2-oxoethyl]-1-O-[(4-methoxyphenyl)methyl]-6-O-[(phenylmethoxy)methyl]-, (2E)- (9CI) (CA INDEX NAME)

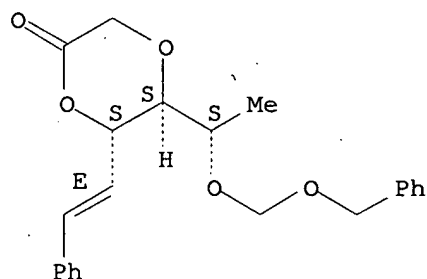
Absolute stereochemistry. Rotation (+).  
Double bond geometry as shown.



RN 264132-27-6 HCAPLUS

CN 1,4-Dioxan-2-one, 6-[(1E)-2-phenylethenyl]-5-[(1S)-1-[(phenylmethoxy)methoxy]ethyl]-, (5S,6S)- (9CI) (CA INDEX NAME)

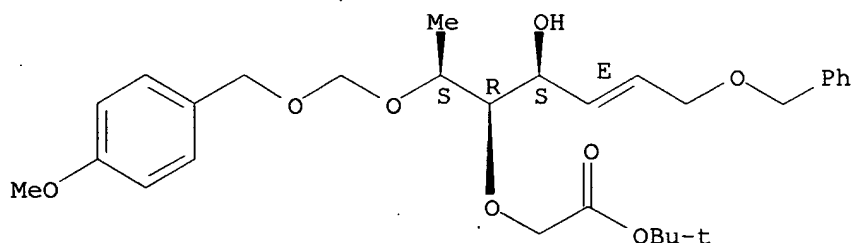
Absolute stereochemistry.  
Double bond geometry as shown.



RN 264132-39-0 HCAPLUS

CN L-arabino-Hept-2-enitol, 2,3,7-trideoxy-5-O-[2-(1,1-dimethylethoxy)-2-oxoethyl]-6-O-[[ (4-methoxyphenyl)methoxy]methyl]-1-O-(phenylmethyl)-, (2E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).  
Double bond geometry as shown.



REFERENCE COUNT:

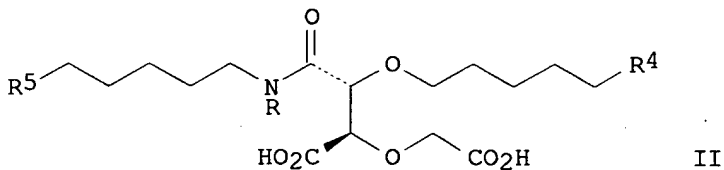
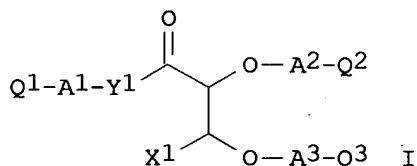
64

THERE ARE 64 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 14 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:15153 HCAPLUS  
 DOCUMENT NUMBER: 132:78549  
 TITLE: Preparation of tartaric acid derivatives as squalene synthase inhibitors  
 INVENTOR(S): Usui, Hiroyuki; Kagechika, Katsuji; Nagashima, Hajime; Nagamochi, Masatoshi; Ohta, Masahiro; Yokomizo, Aki; Motoki, Kayoko  
 PATENT ASSIGNEE(S): Daiichi Pharmaceutical Co., Ltd., Japan  
 SOURCE: PCT Int. Appl., 347 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000000458	A1	20000106	WO 1999-JP3411	19990625
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9943940	A	20000117	AU 1999-43940	19990625
PRIORITY APPLN. INFO.:			JP 1998-181272	A 19980626
			WO 1999-JP3411	W 19990625
OTHER SOURCE(S):		MARPAT 132:78549		
GI				



AB 2,3-Dihydroxypropanoic acid compds. represented by general formula [I; X1 represents optionally esterified carboxy, tetrazol-5-yl, P(O)(OH)<sub>2</sub>, or SO<sub>3</sub>H; Y1 represents a single bond, O, (un)substituted NH; at least one of A1, A2 and A3 represents a group represented by the following general formula R<sub>2</sub>-a1-R<sub>3</sub>-a2→ (wherein R<sub>2</sub> represents divalent C<sub>2</sub>-12 hydrocarbyl; R<sub>3</sub> represents a single bond or a divalent C<sub>2</sub>-12 hydrocarbyl; and a1 and a2 represent each a single bond, S, SO<sub>2</sub>, SO<sub>2</sub>NH, O, (un)substituted NH or CONH, CO, etc.); and at least one of Q1, Q2 and Q3

represents cyclic hydrocarbonyl or a heterocycle while the remaining one(s) represent hydrogen, optionally esterified carboxy, hydrocarbonyl or a heterocycle] or salts are prepared. Because of having a potent inhibitory effect on squalene synthase, these compounds are useful as preventives and/or remedies for hypercholesterolemia, hyperlipemia, and arteriosclerosis. Thus, tert-Bu (2R,3R)-3-carboxy-2-(tert-butoxycarbonylmethoxy)-3-[5-(2-naphthyl)pentyl]propanoate (preparation given) was condensed with 5-(2-naphthyl)pentylamine hydrochloride using 4-dimethylaminopyridine and 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide hydrochloride in CH<sub>2</sub>Cl<sub>2</sub> at room temperature for 21 h, followed by deprotection, to give L-tartaric acid derivative (II; R = H, R<sub>4</sub> = R<sub>5</sub> = 2-naphthyl) (III). III and II (R = Me, R<sub>4</sub> = 3,4-dimethylphenyl, R<sub>5</sub> = benzothiazol-6-yl) showed IC<sub>50</sub> of 0.15 + 10<sup>-5</sup> and 0.002 + 10<sup>-5</sup> M, resp., for inhibiting the cholesterol synthesis in rat liver cells.

IT 210053-85-3P

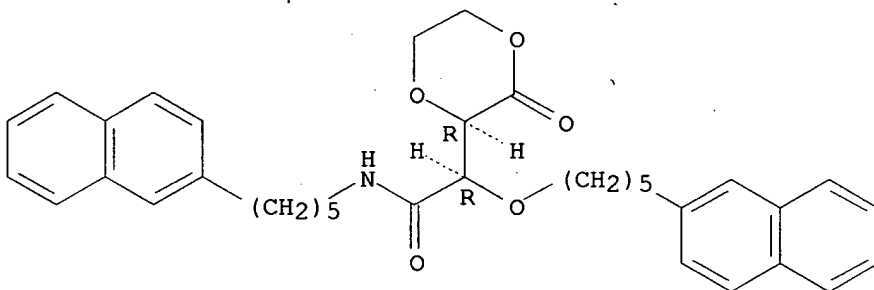
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of tartaric acid derivs. as squalene synthase inhibitors as preventives and/or remedies for hypercholesterolemia, hyperlipemia, and arteriosclerosis)

RN 210053-85-3 HCAPLUS

CN 1,4-Dioxane-2-acetamide, N-[5-(2-naphthalenyl)pentyl]-α-[[5-(2-naphthalenyl)pentyl]oxy]-3-oxo-, (αR,2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 210055-01-9P

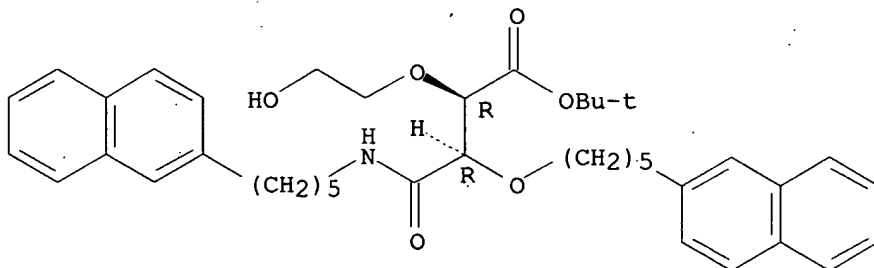
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of tartaric acid derivs. as squalene synthase inhibitors as preventives and/or remedies for hypercholesterolemia, hyperlipemia, and arteriosclerosis)

RN 210055-01-9 HCAPLUS

CN Butanoic acid, 2-(2-hydroxyethoxy)-4-[[5-(2-naphthalenyl)pentyl]amino]-3-[[5-(2-naphthalenyl)pentyl]oxy]-4-oxo-, 1,1-dimethylethyl ester, (2R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 15 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1998:485033 HCAPLUS

DOCUMENT NUMBER: 129:108913

TITLE: Preparation of tartaric acid derivatives as squalene synthetase inhibitors

INVENTOR(S): Usui, Hiroyuki; Kagechika, Katsuji; Nagashima, Hajime

PATENT ASSIGNEE(S): Daiichi Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 281 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

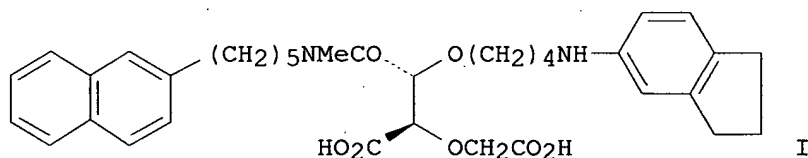
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9829380	A1	19980709	WO 1997-JP4879	19971226
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
CA 2275603	A1	19980709	CA 1997-2275603	19971226
AU 9853411	A	19980731	AU 1998-53411	19971226
EP 949238	A1	19991013	EP 1997-950426	19971226
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
CN 1241994	A	20000119	CN 1997-181034	19971226
BR 9714087	A	20000509	BR 1997-14087	19971226
NO 9903171	A	19990825	NO 1999-3171	19990625
PRIORITY APPLN. INFO.:			JP 1996-350673	A 19961227
			WO 1997-JP4879	W 19971226

OTHER SOURCE(S): MARPAT 129:108913

GI



AB Claimed are compds. represented by general formula  $\text{Q1-A1-Y1COCH(O-A2-Q2)CH(X1)O-A3-Q3}$  [ $\text{X1}$  = optionally esterified  $\text{CO}_2\text{H}$ , tetrazol-5-yl,  $\text{SO}_3\text{H}$ ,  $\text{PO}_3\text{H}_2$ ;  $\text{Y1}$  = a single bond, O, NH, N(OH), (un)substituted hydrocarbylimino; at least one of  $\text{A1}$ ,  $\text{A2}$  and  $\text{A3}$  =  $\text{R2-a1-R3-a2}$ ; wherein  $\text{R2}$  = a divalent C2-12 hydrocarbon group;  $\text{R3}$  = a single bond, divalent C2-12 hydrocarbon group;  $\text{a1}$ ,  $\text{a2}$  = a single bond, S, SO,  $\text{SO}_2$ ,  $\text{SO}_2\text{NH}$ , O, NH, N(OH), (un)substituted hydrocarbylimino, (un)substituted  $\text{CONH}_2$ , CO, SiR6R7 (wherein  $\text{R6}$ ,  $\text{R7}$  = optionally substituted hydrocarbyl); and  $\rightarrow$  represents the bond to  $\text{Q1}$ ,  $\text{Q2}$  or  $\text{Q3}$ ; while the remainder(s) of  $\text{A1}$ ,  $\text{A2}$ , and

A2 = R8-a3-R9-a4→; wherein R8, R9 a single bond, divalent C2-12 hydrocarbon group; a3, a4 = a group listed in a1 and a2; and → represents the bond to Q1, Q2 or Q3; and at least one of Q1, Q2 and Q3 = (un)substituted cyclic hydrocarbonyl or heterocyclyl, while the remainder(s) = hydrogen, optionally esterified CO2H, (un)substituted hydrocarbonyl or heterocyclyl] or salts thereof and drugs containing the same as the active ingredient. Because of having potent squalene synthetase inhibitory effects, these compds. are useful as remedies or preventives for hypercholesterolemia, hyperlipidemia, and arteriosclerosis. The title compound (I) (preparation given) showed IC50 of 0.019 + 10-6M for inhibiting cholesterol in rat liver cells.

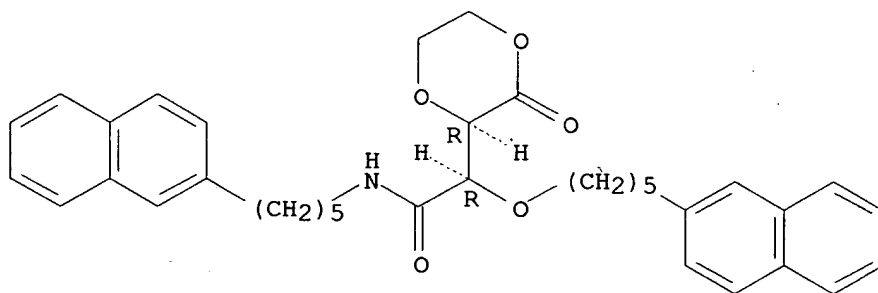
IT 210053-85-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of tartaric acid derivs. as squalene synthetase inhibitors for treatment of hypercholesterolemia, hyperlipidemia, and arteriosclerosis)

RN 210053-85-3 HCAPLUS

CN 1,4-Dioxane-2-acetamide, N-[5-(2-naphthalenyl)pentyl]-α-[[5-(2-naphthalenyl)pentyl]oxy]-3-oxo-, (αR,2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



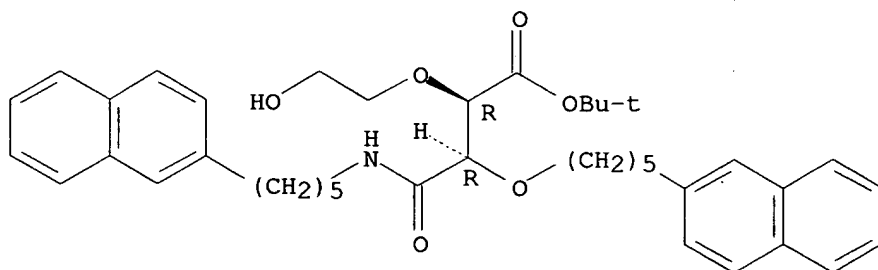
IT 210055-01-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of tartaric acid derivs. as squalene synthetase inhibitors for treatment of hypercholesterolemia, hyperlipidemia, and arteriosclerosis)

RN 210055-01-9 HCAPLUS

CN Butanoic acid, 2-(2-hydroxyethoxy)-4-[[5-(2-naphthalenyl)pentyl]amino]-3-[[5-(2-naphthalenyl)pentyl]oxy]-4-oxo-, 1,1-dimethylethyl ester, (2R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT:

14

THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS

L12 ANSWER 16 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1998:373030 HCAPLUS

DOCUMENT NUMBER: 129:180091

TITLE: Polylactones. Part 42. Zn L-lactate-catalyzed polymerizations of 1,4-dioxan-2-one

AUTHOR(S): Kricheldorf, H. R.; Damrau, Dirk-Olaf

CORPORATE SOURCE: Institut Technische Makromolekulare Chemie, Universitaet Hamburg, Hamburg, D-20146, Germany

SOURCE: Macromolecular Chemistry and Physics (1998), 199(6), 1089-1097

CODEN: MCHPES; ISSN: 1022-1352

PUBLISHER: Huethig &amp; Wepf Verlag

DOCUMENT TYPE: Journal

LANGUAGE: English

AB 1,4-Dioxan-2-one (DOXA) was polymerized by means of Zn L-lactate (ZnLac2) as catalyst in bulk. Upon systematic variation of the temperature, the reaction time, and the monomer/catalyst (M/C) mole ratio the highest mol. wts. were obtained at 100° and M/C ratios between 2000-4000. However, long reaction times (8-14 days) were required to obtain optimum results. ZnCl2 proved to be a somewhat less reactive catalyst, whereas ZnBr2 proved to be as efficient as ZnLac2. Addition of benzyl alc. as a coinitiator at a fixed DOXA/ZnLac2 ratio allowed a systematic control of the mol. weight. Furthermore the formation of benzyl ester end-groups was detected. Moreover, ZnLac2 allows the incorporation of various bioactive alcs. or phenols (e.g. testosterone, stigmasterol, ergocalciferol, cortisone,  $\alpha$ -tocopherol) in the form of ester end-groups. Finally several properties of polydioxanone are reported and discussed, such as solubilities, IR, <sup>1</sup>H NMR, and <sup>13</sup>C NMR spectroscopic data, and thermogravimetric anal.

IT 29223-92-5DP, 1,4-Dioxan-2-one homopolymer, esters

210906-29-9P 210906-33-5P 210906-38-0P

210906-44-8P 210993-89-8P 210993-90-1P

210993-91-2P 210993-92-3P 210993-93-4P

211450-23-6P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)

(polymerization of dioxanone in presence of nontoxic zinc lactate catalyst

and bioactive alcs. or phenols)

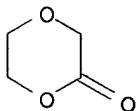
RN 29223-92-5 HCAPLUS

CN 1,4-Dioxan-2-one, homopolymer (9CI) (CA INDEX NAME)

CM 1

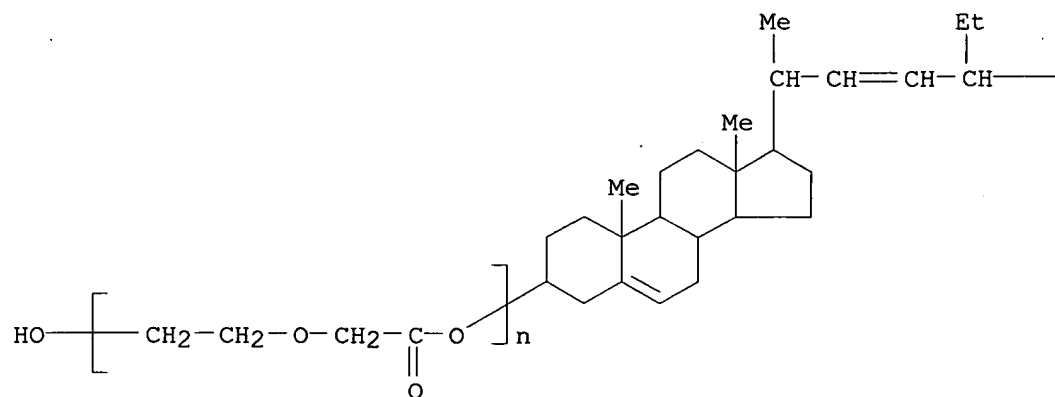
CRN 3041-16-5

CMF C4 H6 O3



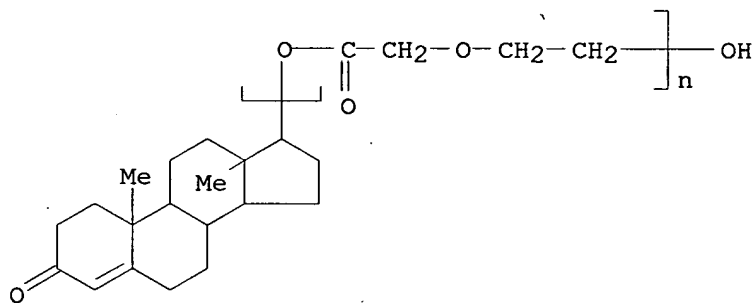
RN 210906-29-9 HCAPLUS

CN Poly[oxy(1-oxo-1,2-ethanediyl)oxy-1,2-ethanediyl],  $\alpha$ -(3 $\beta$ ,22E)-stigmasta-5,22-dien-3-yl- $\omega$ -hydroxy- (9CI) (CA INDEX NAME)

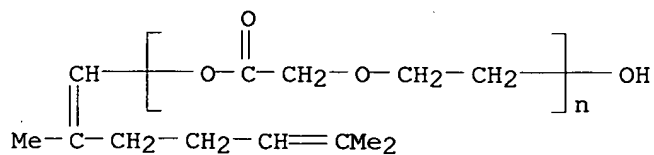


—Pr-i

RN 210906-33-5 HCAPLUS

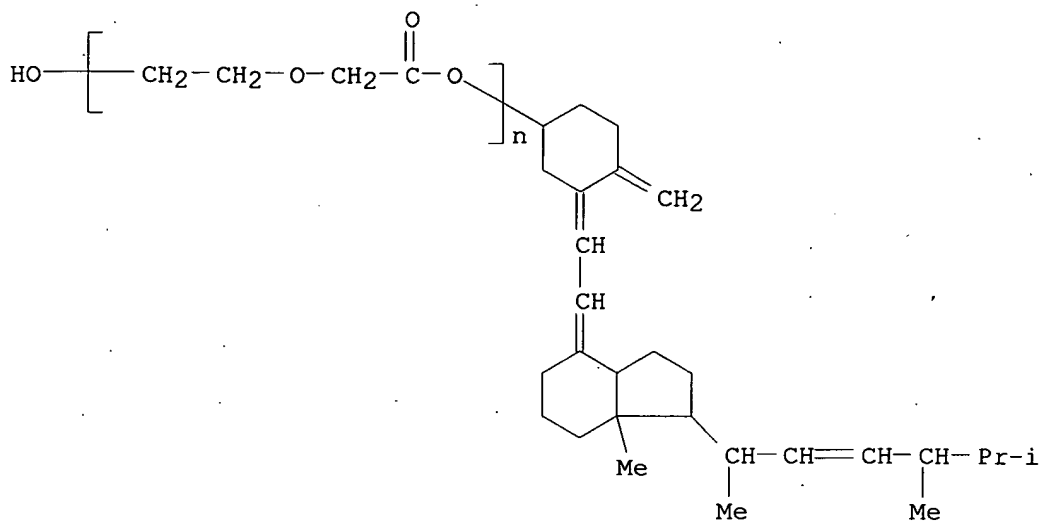
CN Poly[oxy(1-oxo-1,2-ethanediyl)oxy-1,2-ethanediyl],  $\alpha$ -[(17 $\beta$ )-3-oxoandrost-4-en-17-yl]- $\omega$ -hydroxy- (9CI) (CA INDEX NAME)

RN 210906-38-0 HCAPLUS

CN Poly[oxy(1-oxo-1,2-ethanediyl)oxy-1,2-ethanediyl],  $\alpha$ -[(1E)-2,6-dimethyl-1,5-heptadienyl]- $\omega$ -hydroxy- (9CI) (CA INDEX NAME)

RN 210906-44-8 HCAPLUS

CN Poly[oxy(1-oxo-1,2-ethanediyl)oxy-1,2-ethanediyl],  $\alpha$ -(3 $\beta$ ,5Z,7E,22E,24R)-9,10-secoergosta-5,7,10(19),22-tetraen-3-yl- $\omega$ -hydroxy- (9CI) (CA INDEX NAME)

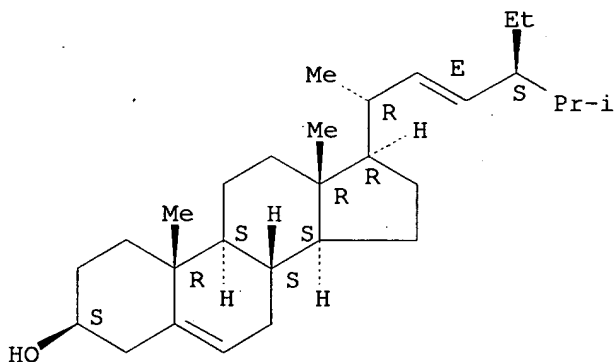


RN 210993-89-8 HCAPLUS  
 CN Stigmasta-5,22-dien-3-ol, (3 $\beta$ ,22E)-, polymer with 1,4-dioxan-2-one  
 (9CI) (CA INDEX NAME)

CM 1

CRN 83-48-7  
 CMF C29 H48 O

Absolute stereochemistry.  
 Double bond geometry as shown.

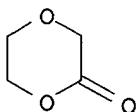


CM 2

CRN 29223-92-5  
 CMF (C4 H6 O3)x  
 CCI PMS

CM 3

CRN 3041-16-5  
 CMF C4 H6 O3



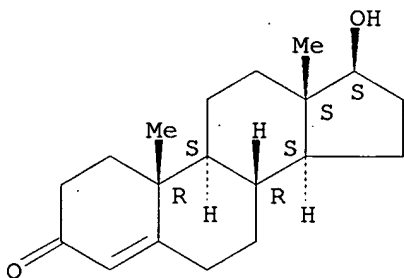
RN 210993-90-1 HCAPLUS  
 CN Androst-4-en-3-one, 17-hydroxy-, (17 $\beta$ )-, polymer with  
 1,4-dioxan-2-one (9CI) (CA INDEX NAME)

CM 1

CRN 58-22-0

CMF C19 H28 O2

Absolute stereochemistry. Rotation (+).



CM 2

CRN 29223-92-5

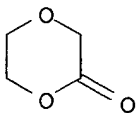
CMF (C4 H6 O3)x

CCI PMS

CM 3

CRN 3041-16-5

CMF C4 H6 O3



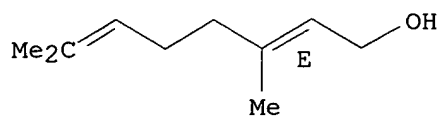
RN 210993-91-2 HCAPLUS  
 CN 1,4-Dioxan-2-one, homopolymer, (2E)-3,7-dimethyl-2,6-octadienyl ester  
 (9CI) (CA INDEX NAME)

CM 1

CRN 106-24-1

CMF C10 H18 O

Double bond geometry as shown.

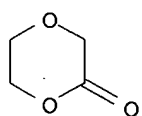


CM 2

CRN 29223-92-5  
CMF (C4 H6 O3) x  
CCI PMS

CM 3

CRN 3041-16-5  
CMF C4 H6 O3

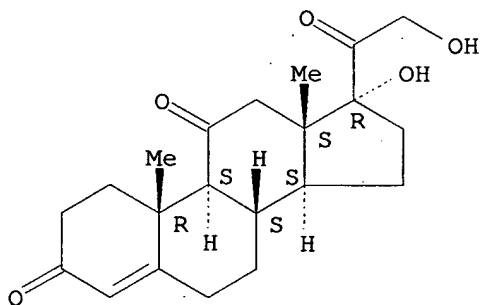


RN 210993-92-3 HCAPLUS  
CN Pregn-4-ene-3,11,20-trione, 17,21-dihydroxy-, polymer with  
1,4-dioxan-2-one (9CI) (CA INDEX NAME)

CM 1

CRN 53-06-5  
CMF C21 H28 O5

Absolute stereochemistry.

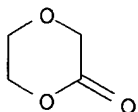


CM 2

CRN 29223-92-5  
CMF (C4 H6 O3) x  
CCI PMS

CM 3

CRN 3041-16-5  
CMF C4 H6 O3



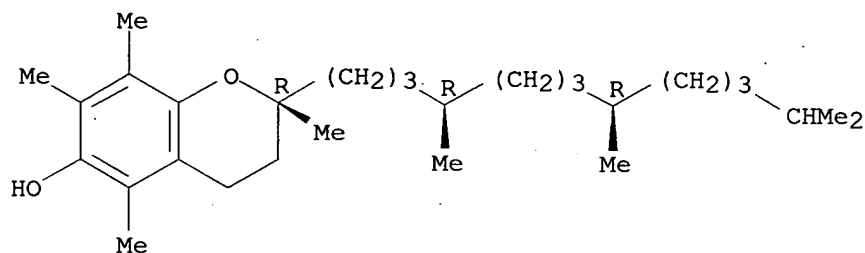
RN 210993-93-4 HCAPLUS  
 CN 1,4-Dioxan-2-one, homopolymer, (2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-  
 [(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl ester (9CI) (CA  
 INDEX NAME)

CM 1

CRN 59-02-9

CMF C29 H50 O2

Absolute stereochemistry.



CM 2

CRN 29223-92-5

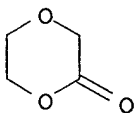
CMF (C4 H6 O3)x

CCI PMS

CM 3

CRN 3041-16-5

CMF C4 H6 O3



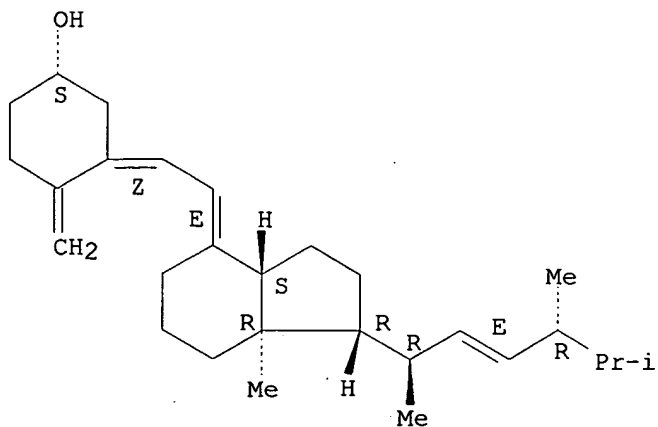
RN 211450-23-6 HCAPLUS  
 CN 1,4-Dioxan-2-one, homopolymer, (3β,5Z,7E,22E)-9,10-secoergosta-  
 5,7,10(19),22-tetraen-3-yl ester (9CI) (CA INDEX NAME)

CM 1

CRN 50-14-6

CMF C28 H44 O

Absolute stereochemistry. Rotation (+).  
 Double bond geometry as shown.

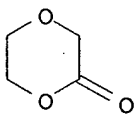


CM 2

CRN 29223-92-5  
CMF (C4 H6 O3)x  
CCI PMS

CM 3

CRN 3041-16-5  
CMF C4 H6 O3



L12 ANSWER 17 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1996:725354 HCAPLUS

DOCUMENT NUMBER: 126:19445

TITLE: Bioabsorbable branched polymers containing units derived from dioxanone for manufacturing medical/surgical devices

INVENTOR(S): Bennett, Steven L.; Jiang, Ying; Gruskin, Elliott A.; Connolly, Kevin M.

PATENT ASSIGNEE(S): United States Surgical Corporation, USA

SOURCE: U.S., 8 pp., Cont.-in-part of U.S. Ser. No. 278,898.  
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5578662	A	19961126	US 1995-477098	19950607
CA 2153867	A1	19960123	CA 1995-2153867	19950713
US 6207767	B1	20010327	US 1997-979009	19971126
US 6339130	B1	20020115	US 1999-282724	19990331
US 2002032298	A1	20020314	US 2001-934639	20010822
US 2004058164	A1	20040325	US 2003-630945	20030730
US 2006014023	A9	20060119		

US 7097907  
US 2006293406  
PRIORITY APPLN. INFO.:

B2 20060829  
A1 20061228

US 2006-511133 20060828  
US 1994-278898 A2 19940722  
US 1995-477098 A2 19950607  
US 1996-733683 B1 19961017  
US 1999-282724 A1 19990331  
US 2001-934639 A1 20010822  
US 2003-630945 A3 20030730

AB Star polymers of soft segment-forming monomers such as alkylene oxide or carbonate or dioxanone are useful in forming surgical devices for example, as fiber coatings, surgical adhesives or bone putty, or tissue growth substrate. The star polymers can be end-capped with lysine isocyanate, mixed with a filler and/or cross-linked.

IT 184483-38-3P

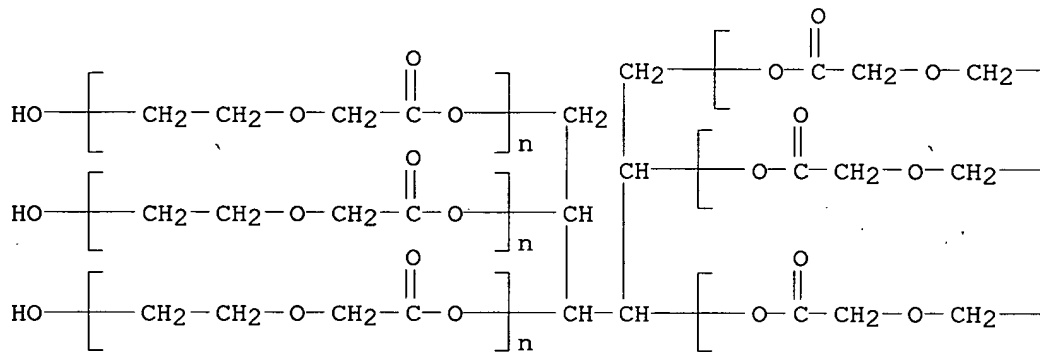
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(bioabsorbable branched polymers containing units derived from dioxanone for manufacturing medical/surgical devices)

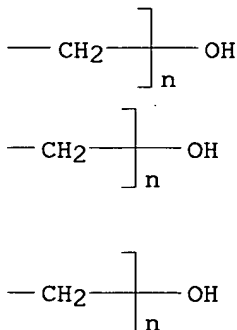
RN 184483-38-3 HCAPLUS

CN Poly[oxy(1-oxo-1,2-ethanediyl)oxy-1,2-ethanediyl],  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with D-mannitol (6:1) (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IT 184483-40-7DP, reaction product with diethylethanolamine  
184483-40-7P 184483-41-8P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation);

USES (Uses)

(star-; bioabsorbable branched polymers containing units derived from dioxanone for manufacturing medical/surgical devices)

RN 184483-40-7 HCAPLUS

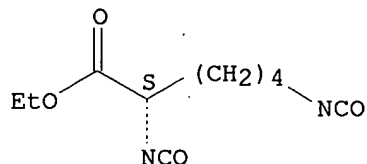
CN Hexanoic acid, 2,6-diisocyanato-, ethyl ester, (S)-, polymer with 1,4-dioxan-2-one and 2-oxepanone, block (9CI) (CA INDEX NAME)

CM 1

CRN 45172-15-4

CMF C10 H14 N2 O4

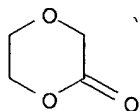
Absolute stereochemistry.



CM 2

CRN 3041-16-5

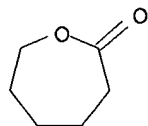
CMF C4 H6 O3



CM 3

CRN 502-44-3

CMF C6 H10 O2



RN 184483-40-7 HCAPLUS

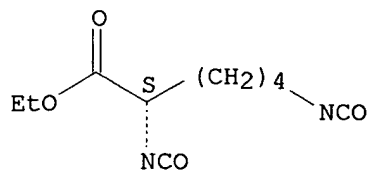
CN Hexanoic acid, 2,6-diisocyanato-, ethyl ester, (S)-, polymer with 1,4-dioxan-2-one and 2-oxepanone, block (9CI) (CA INDEX NAME)

CM 1

CRN 45172-15-4

CMF C10 H14 N2 O4

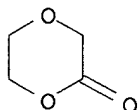
Absolute stereochemistry.



CM 2

CRN 3041-16-5

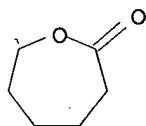
CMF C4 H6 O3



CM 3

CRN 502-44-3

CMF C6 H10 O2



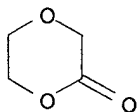
RN 184483-41-8 HCAPLUS

CN 2-Oxepanone, polymer with 1,6-diisocyanatohexane and 1,4-dioxan-2-one, block (9CI) (CA INDEX NAME)

CM 1

CRN 3041-16-5

CMF C4 H6 O3



CM 2

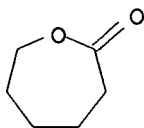
CRN 822-06-0

CMF C8 H12 N2 O2

OCN-(CH2)6-NCO

CM 3

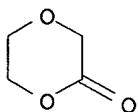
CRN 502-44-3  
CMF C6 H10 O2



IT 41706-83-6P, Glycolide-p-dioxanone copolymer 184483-39-4P  
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT  
(Reactant or reagent)  
(star; bioabsorbable branched polymers containing units derived from  
dioxanone for manufacturing medical/surgical devices)  
RN 41706-83-6 HCAPLUS  
CN 1,4-Dioxane-2,5-dione, polymer with 1,4-dioxan-2-one (9CI) (CA INDEX  
NAME)

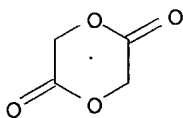
CM 1

CRN 3041-16-5  
CMF C4 H6 O3

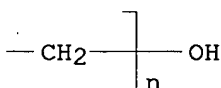
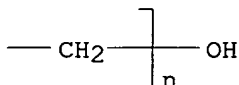
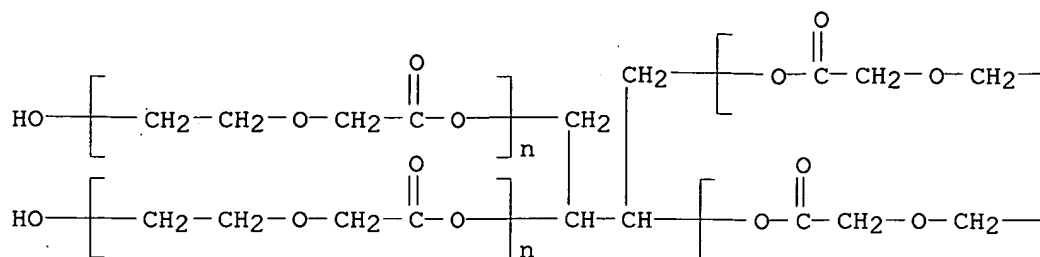


CM 2

CRN 502-97-6  
CMF C4 H4 O4



RN 184483-39-4 HCAPLUS  
CN Poly[oxy(1-oxo-1,2-ethanediyl)oxy-1,2-ethanediyl],  
 $\alpha, \alpha', \alpha'', \alpha'''$ -1,2,3,4-  
butanetetrayltetrakis[ $\omega$ -hydroxy-, (R\*,R\*)- (9CI) (CA INDEX NAME)]



L12 ANSWER 18 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1995:994873 HCAPLUS  
 DOCUMENT NUMBER: 124:117978  
 TITLE: Preparation of L-N6-(1-iminoethyl)lysine derivatives  
 useful as nitric oxide synthase inhibitors  
 INVENTOR(S): Hallinan, E. Ann; Tjoeng, Foe S.; Fok, Kam F.; Hagen,  
 Timothy J.; Toth, Mihaly V.; Tsybalov, Sofya;  
 Pitzele, Barnett S.  
 PATENT ASSIGNEE(S): G.D. Searle and Co., USA  
 SOURCE: PCT Int. Appl., 106 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9524382	A1	19950914	WO 1995-US2669	19950308
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TT, UA				
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2184691	A1	19950914	CA 1995-2184691	19950308
CA 2184691	C	20060221		
AU 9521156	A	19950925	AU 1995-21156	19950308
EP 749418	A1	19961227	EP 1995-913969	19950308
EP 749418	B1	20000830		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
AT 195933	T	20000915	AT 1995-913969	19950308
ES 2151055	T3	20001216	ES 1995-913969	19950308
PT 749418	T	20010131	PT 1995-913969	19950308
US 6143790	A	20001107	US 1996-702695	19960906

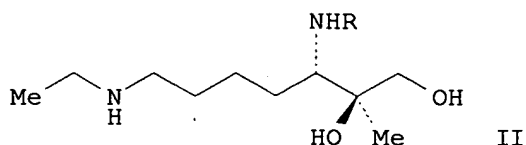
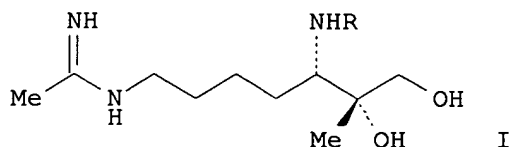
GR 3034576  
PRIORITY APPLN. INFO.:

T3 20010131  
MARPAT 124:117978

GR 2000-402265  
US 1994-209094  
WO 1995-US2669

20001006  
A2 19940310  
W 19950308

OTHER SOURCE(S):  
GI



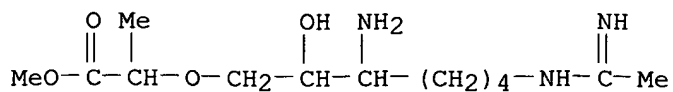
AB Novel amino glycol derivs. of L-N6-(1-iminoethyl)lysine represented by the general formula  $YC(:NR_4)NR_3XCH(NR_1R_2)-A-B$  [ $Y = H$ , each (un)substituted alkyl, alkenyl, alkynyl, aromatic hydrocarbyl, alicyclic hydrocarbyl,  $NH_2$ , or heterocyclyl containing 1-4 heteroatoms selected from O, N, and S;  $X =$  alkyl, alkenyl, alkynyl, aromatic hydrocarbyl,  $(CH_2)_mQ(CH_2)_n$  (wherein  $m = 1-3$ ,  $n = 1-3$ ;  $Q = S, S(O), SO_2, O, CO$ , etc.);  $R_1 - R_4 = H$ , alkyl;  $A = CO$ , each (un)substituted alkyl, alkenyl, alkynyl, alicyclic hydrocarbyl, or heterocyclyl containing 1-4 heteroatoms selected from O, N, and S;  $B = H$ , each (un)substituted alkyl, alkenyl, alkynyl, alkoxy, OH, alkoxycarbonyl, alkylaryloxy, thiol, alkylthio, alkylarylthio, arylthio, alkylsulfinyl, alkylarylsulfinyl, arylsulfinyl, alkylsulfonyl, alkylarylsulfonyl, arylsulfonyl, aromatic or alicyclic hydrocarbyl, or heterocyclyl containing 1-4 heteroatoms selected from O, N, and S; or  $B = CO_2R_5, CONR_5R_6, P(O)(OR_5)OR_6, NHOH, N(OH)CO NR_5R_6, NR_5C(O)NR_6R_7, NR_5CON(OH)R_6, CONHOH$ ; where  $R_5, R_6, R_7 = H$ , each (un)substituted alkyl, aromatic or aliphatic hydrocarbyl] are prepared. Thus, Z-Lys(Boc)-N(OMe)Me and Me<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>NMe<sub>2</sub> were dissolved in THF, treated a 1.4 M solution of MeLi in Et<sub>2</sub>O at -78°, and stirred at the same temperature for 3 h to give (S)-BocNH(CH<sub>2</sub>)<sub>4</sub>CH(NHZ)COMe, which was condensed with methyltriphenylphosphonium bromide in the presence of potassium hexamethyldisilazide in PhMe at -20° for 1.5 h to give (S)-BocNH(CH<sub>2</sub>)<sub>4</sub>CH(NHZ)C(:CH<sub>2</sub>)Me. The latter compound was hydroxylated by OsO<sub>4</sub> and N-methylmorpholine in a mixture of acetone, H<sub>2</sub>O, and Me<sub>3</sub>COH to give the diol BocNH(CH<sub>2</sub>)<sub>4</sub>CH(NHZ)CMe(OH)CH<sub>2</sub>OH which was deprotected with 4 N HCl in dioxane to HCl.H<sub>2</sub>N(CH<sub>2</sub>)<sub>4</sub>CH(NHZ)CMe(OH)CH<sub>2</sub>OH and condensed with Me acetimidate hydrochloride in DMF containing Et<sub>3</sub>N to give, after reversed phase column chromatog. using a YMC AQ-363-10P ODS column, the diastereoisomers (I and II;  $R = Z$ ). The latter compds. were reduced under catalytic hydrogenation conditions using Pd-C at 5 psi H to give the title N-(iminoethyl)lysinol compds. I and II ( $R = H$ ), which showed IC<sub>50</sub> of 9.3 and 187 μM, resp., against human inducible nitric oxide synthase.

IT 172832-99-4P 172833-00-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of N-(iminoethyl)lysinol derivs. as nitric oxide synthase inhibitors)

RN 172832-99-4 HCAPLUS

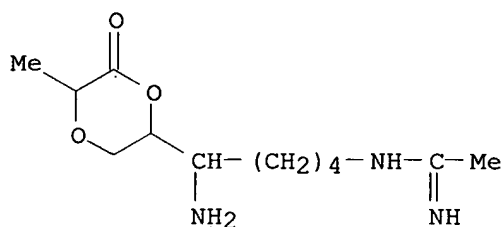
CN Propanoic acid, 2-[[[3-amino-2-hydroxy-7-[(1-iminoethyl)amino]heptyl]oxy]-, methyl ester, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

RN 172833-00-0 HCAPLUS

CN Ethanimidamide, N-[5-amino-5-(5-methyl-6-oxo-1,4-dioxan-2-yl)pentyl]-, dihydrochloride (9CI) (CA INDEX NAME)



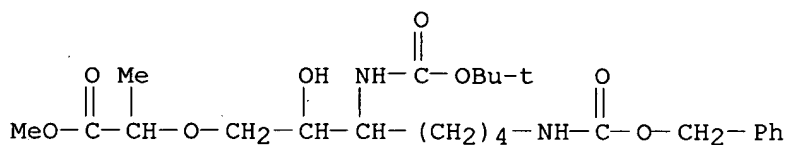
● 2 HCl

IT 172833-79-3P 172833-80-6P 172833-81-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of N-(iminoethyl)lysinoal derivs. as nitric oxide synthase inhibitors)

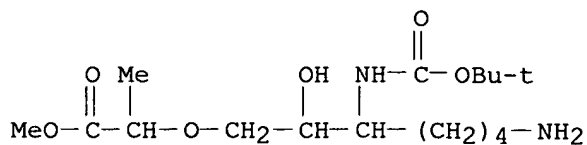
RN 172833-79-3 HCAPLUS

CN Propanoic acid, 2-[3-[[[(1,1-dimethylethoxy)carbonyl]amino]-2-hydroxy-3-[4-[[[(phenylmethoxy)carbonyl]amino]butyl]propoxy]-, methyl ester (9CI) (CA INDEX NAME)



RN 172833-80-6 HCAPLUS

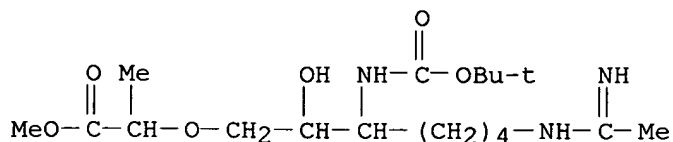
CN Propanoic acid, 2-[3-(4-aminobutyl)-3-[[[(1,1-dimethylethoxy)carbonyl]amino]-2-hydroxypropoxy]-, methyl ester (9CI) (CA INDEX NAME)



RN 172833-81-7 HCAPLUS

CN Propanoic acid, 2-[3-[[[(1,1-dimethylethoxy)carbonyl]amino]-2-hydroxy-3-[4-

[(1-iminoethyl)amino]butyl]propoxy]-, methyl ester (9CI) (CA INDEX NAME)



L12 ANSWER 19 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1994:297617 HCAPLUS

DOCUMENT NUMBER: 120:297617

TITLE: Diastereoselective alkylations of tert-butyl glycolate etherenolates

AUTHOR(S): Wittenberger, Steven J.; Boyd, Steven A.; Baker, William R.

CORPORATE SOURCE: Pharm. Prod. Div., Abbott Lab., Abbott Park, IL, 60064, USA

SOURCE: Synlett (1993), (10), 795-7

CODEN: SYNLES; ISSN: 0936-5214

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 120:297617

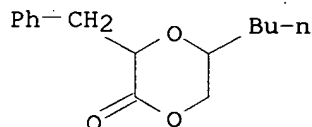
AB Lithium enolates derived from tert-Bu glycolate ethers Me<sub>3</sub>CO<sub>2</sub>CCH<sub>2</sub>OCHRBu [R = 2-furyl, CH<sub>2</sub>OH, CH<sub>2</sub>OSiEt<sub>3</sub>] possessing O-containing functional groups which are capable of chelating the Li counter ion were alkylated with PhCH<sub>2</sub>Br. Diastereoselectively in the alkylation reaction ranged from 1:1 to 1:10. A bicyclo[3.3.0]enolate structure is proposed to account for these observations.

IT 154994-35-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and reduction of)

RN 154994-35-1 HCAPLUS

CN 1,4-Dioxan-2-one, 5-butyl-3-(phenylmethyl)- (9CI) (CA INDEX NAME)

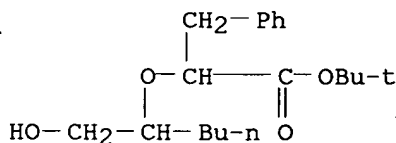


IT 154994-33-9P

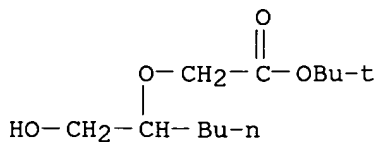
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and silylation and cyclization of)

RN 154994-33-9 HCAPLUS

CN Benzenepropanoic acid, α-[[1-(hydroxymethyl)pentyl]oxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

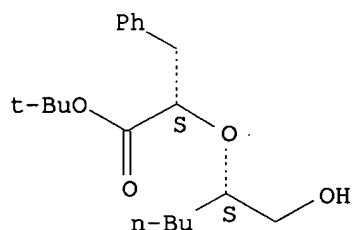


IT 154994-21-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and stereoselective alkylation of)  
 RN 154994-21-5 HCAPLUS  
 CN Acetic acid, [[1-(hydroxymethyl)pentyl]oxy]-, 1,1-dimethylethyl ester  
 (9CI) (CA INDEX NAME)



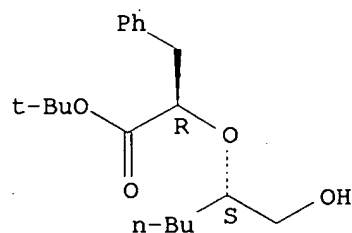
IT 154994-24-8P 154994-27-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 154994-24-8 HCAPLUS  
 CN Benzenepropanoic acid,  $\alpha$ -[[1-(hydroxymethyl)pentyl]oxy]-,  
 1,1-dimethylethyl ester, [S-(R\*,R\*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 154994-27-1 HCAPLUS  
 CN Benzenepropanoic acid,  $\alpha$ -[[1-(hydroxymethyl)pentyl]oxy]-,  
 1,1-dimethylethyl ester, [S-(R\*,S\*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L12 ANSWER 20 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1994:217057 HCAPLUS  
 DOCUMENT NUMBER: 120:217057  
 TITLE: Total synthesis of ionophore antibiotic X-14547 A  
 (indanomycin)  
 AUTHOR(S): Burke, Steven D.; Piscopio, Anthony D.; Kort, Michael  
 E.; Matulenko, Mark A.; Parker, Marshall H.;  
 Armistead, David M.; Shankaran, K.  
 CORPORATE SOURCE: Dep. Chem., Univ. Wisconsin, Madison, WI, 53706, USA  
 SOURCE: Journal of Organic Chemistry (1994), 59(2), 332-47

DOCUMENT TYPE:  
LANGUAGE:  
OTHER SOURCE(S):  
GI

CODEN: JOCEAH; ISSN: 0022-3263  
Journal  
English  
CASREACT 120:217057

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB A convergent, enantioselective total synthesis of ionophore antibiotic X-14547A (indanomycin, I) is described. The dioxanone-to-dihydropyran variant of the lactonic Ireland-Claisen rearrangement establishes the dihydropyran nucleus of the left wing fragment. Elaboration to the target synthon utilizes a new methodology for the preparation of stereodefined vinylsilanes II (R = CEt:CHSiMe<sub>3</sub>) from II [R = C(:CH<sub>2</sub>)CH<sub>2</sub>OH] via net S<sub>N</sub>2' coupling of [α-(mesyloxy)allyl]silanes with Grignard reagents catalyzed by CuCN. Salient features in the construction of the right wing subunit include a modification of the Noyori three-component coupling procedure to give cyclopentanone III and the application of a retro hetero Diels-Alder/intramol. Diels-Alder (mock Claisen) process to oxabicyclononanone IV to give indanone V. Palladium-mediated cross coupling of left wing and right wing synthons using Stille's method tolerates a free carboxylic acid and an unprotected acyl pyrrole, affording I directly in its natural absolute configuration.

IT 153868-88-3P 153868-90-7P 154001-93-1P

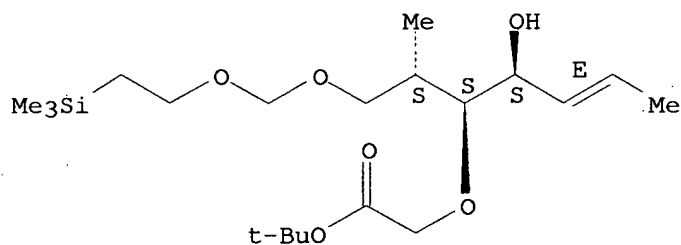
RL: PREP (Preparation)

(intermediate in total synthesis of indanomycin)

RN 153868-88-3 HCAPLUS

CN 5,7,11-Trioxa-2-silatrídecán-13-oic acid, 10-(1-hydroxy-2-butenyl)-2,2,9-trimethyl-, 1,1-dimethylethyl ester, [9S-[9R\*,10R\*(1R\*,2E)]]- (9CI) (CA INDEX NAME)

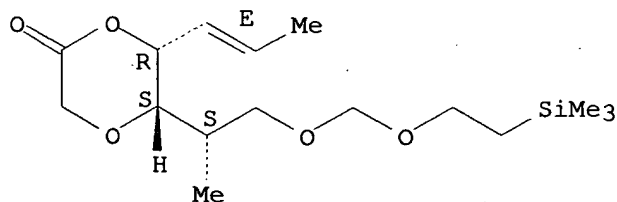
Absolute stereochemistry. Rotation (+).  
Double bond geometry as shown.



RN 153868-90-7 HCAPLUS

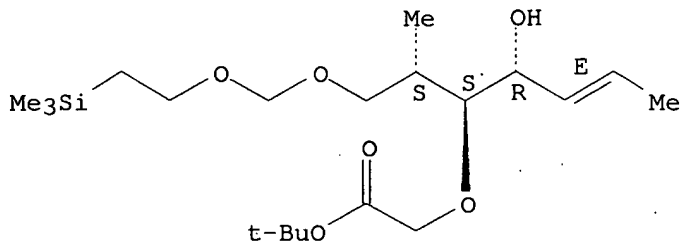
CN 1,4-Dioxan-2-one, 5-[1-methyl-2-[[2-(trimethylsilyl)ethoxy]methoxy]ethyl]-6-(1-propenyl)-, [5S-[5α(R\*),6α(E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



RN 154001-93-1 HCAPLUS  
CN 5,7,11-Trioxa-2-silatridecan-13-oic acid, 10-(1-hydroxy-2-butenyl)-2,2,9-trimethyl-, 1,1-dimethylethyl ester, [9S-[9R\*,10R\*(1S\*,2E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).  
Double bond geometry as shown.

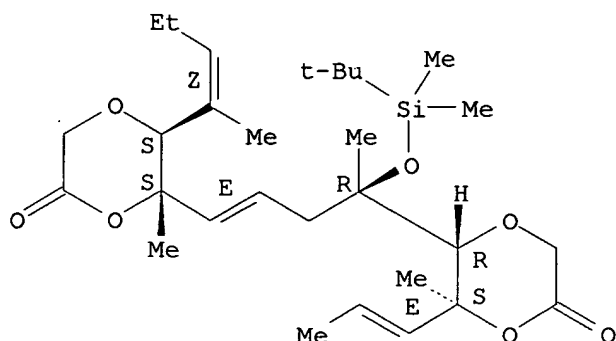


L12 ANSWER 21 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1991:607719 HCAPLUS  
DOCUMENT NUMBER: 115:207719  
TITLE: Double dioxanone-to-dihydropyran reorganization.  
Construction of a C(1)-C(13) erythronolide template  
AUTHOR(S): Burke, Steven D.; Lee, Kevin C.; Santafianos, Dinos  
CORPORATE SOURCE: Dep. Chem., Univ. Wisconsin, Madison, WI, 53706, USA  
SOURCE: Tetrahedron Letters (1991), 32(32), 3957-60  
CODEN: TELEAY; ISSN: 0040-4039  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

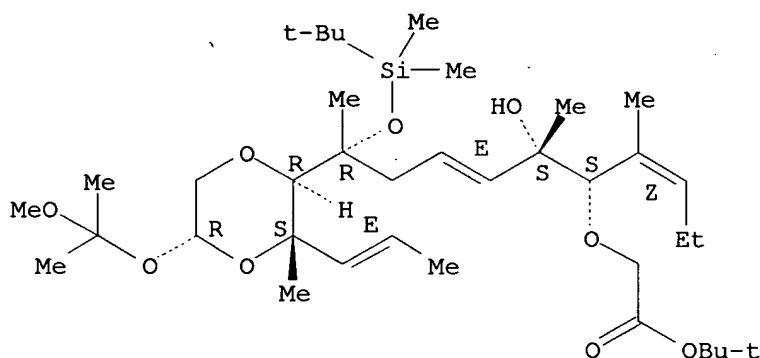
AB Convergent, stereoselective construction of the lactate-derived bis(dioxananone) I and 2 concurrent [3,3] sigmatropic transformations resulted in the trienic bis(dihydropyran) II, a potential precursor for the C(1)-C(13) fragment of erythronolides A and B (III; R = OH, H resp.).  
IT 136683-88-0P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and double sigmatropic rearrangement of, pyranylethylpyran from)  
RN 136683-88-0 HCAPLUS  
CN 1,4-Dioxan-2-one, 5-[1-[[1,1-dimethylethyl]dimethylsilyl]oxy]-1-methyl-4-[2-methyl-3-(1-methyl-1-butenyl)-6-oxo-1,4-dioxan-2-yl]-3-butenyl]-6-methyl-6-(1-propenyl)-, [2S-[2 $\alpha$ [1S\*[5S\*,6R\*(E)],3E],3 $\beta$ (Z)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



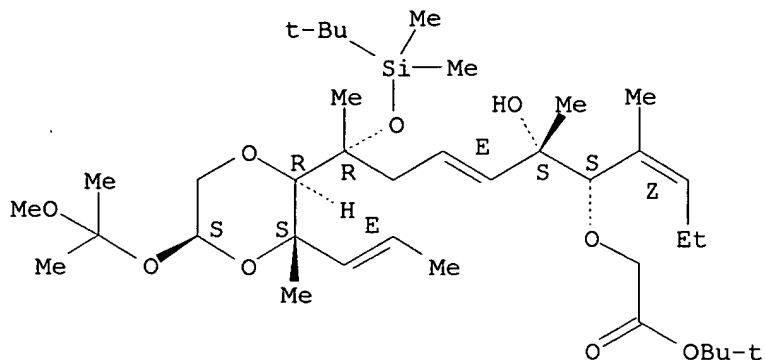
IT 136683-89-1P 136779-57-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation, lactonization, and reduction of)  
 RN 136683-89-1 HCAPLUS  
 CN Acetic acid, [[6-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]-2-hydroxy-6-[5-(1-  
 methoxy-1-methylethoxy)-3-methyl-3-(1-propenyl)-1,4-dioxan-2-yl]-2-methyl-  
 1-(1-methyl-1-butenyl)-3-heptenyl]oxy]-, 1,1-dimethylethyl ester,  
 [2R-[2 $\alpha$ [1S\*(Z),2S\*,3E,6R\*],3 $\beta$ (E),5 $\beta$ ]]- (9CI) (CA INDEX  
 NAME)

Absolute stereochemistry.  
 Double bond geometry as shown.



RN 136779-57-2 HCAPLUS  
 CN Acetic acid, [[6-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]-2-hydroxy-6-[5-(1-  
 methoxy-1-methylethoxy)-3-methyl-3-(1-propenyl)-1,4-dioxan-2-yl]-2-methyl-  
 1-(1-methyl-1-butenyl)-3-heptenyl]oxy]-, 1,1-dimethylethyl ester,  
 [2R-[2 $\alpha$ [1S\*(Z),2S\*,3E,6R\*],3 $\beta$ (E),5 $\alpha$ ]]- (9CI) (CA INDEX  
 NAME)

Absolute stereochemistry.  
 Double bond geometry as shown.



IT 136683-84-6P

RL: SPN (Synthetic preparation); PREP (Preparation)

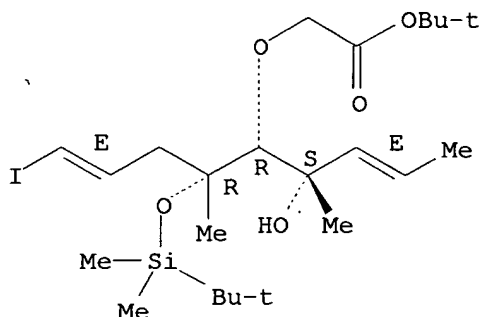
(preparation, lactonization, reduction, and alkylation of, with Me propenyl ether)

RN 136683-84-6 HCAPLUS

CN Acetic acid, [[1-[1-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]-4-iodo-1-methyl-3-butenyl]-2-hydroxy-2-methyl-3-pentenyl]oxy]-, 1,1-dimethylethyl ester, [1R-[1R\*(1R\*,3E),2S\*,3E]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



IT 136683-81-3P

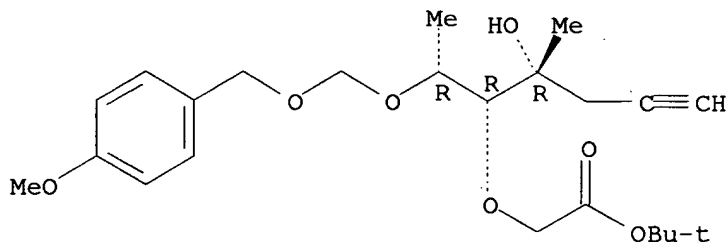
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation, stannylation, and silylation of)

RN 136683-81-3 HCAPLUS

CN Acetic acid, [[2-hydroxy-1-[1-[[[(4-methoxyphenyl)methoxy]methoxy]ethyl]-2-methyl-4-pentynyl]oxy]-, 1,1-dimethylethyl ester, [1R-[1R\*(R\*),2R\*]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



ACCESSION NUMBER: 1991:582935 HCAPLUS

DOCUMENT NUMBER: 115:182935

TITLE: Synthesis of a C(22) → C(34) halichondrin precursor via a double dioxanone-to-dihydropyran rearrangement

AUTHOR(S): Burke, Steven D.; Buchanan, John L.; Rovin, Joshua D.

CORPORATE SOURCE: Dep. Chem., Univ. Wisconsin, Madison, WI, 53706, USA

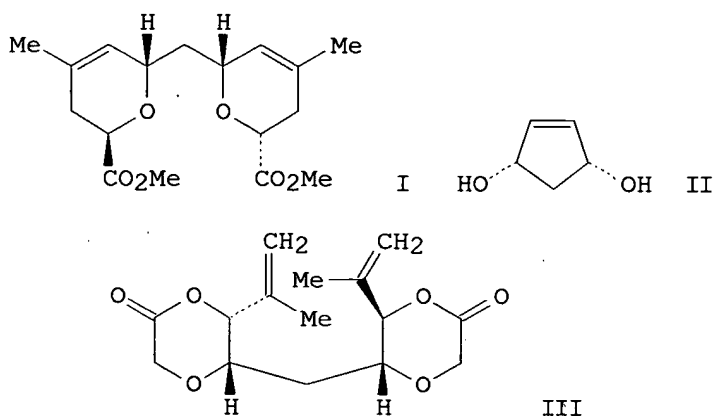
SOURCE: Tetrahedron Letters (1991), 32(32), 3961-4

CODEN: TELEAY; ISSN: 0040-4039

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



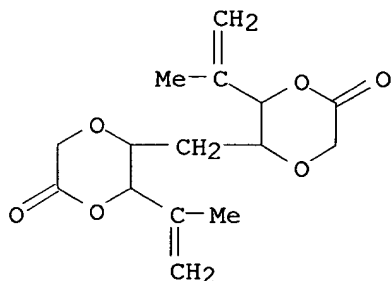
AB The C(22)-C(34) fragment (I) of halichondrins B and C was prepared in 9 steps starting from meso-cyclopentenediol II. A key step was the double [3,3] sigmatropic rearrangement of bis(dioxanone) III to give I.

IT 136683-71-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and double sigmatropic rearrangement of,  
bis(dihydropyranyl)methane from)

RN 136683-71-1 HCAPLUS

CN 1,4-Dioxan-2-one, 5,5'-methylenebis[6-(1-methylethenyl)-,  
[5S-[5α(5'S\*,6'S\*),6α]]- (9CI) (CA INDEX NAME)

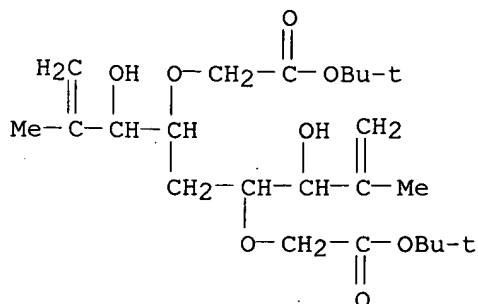


IT 136683-76-6P

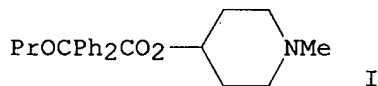
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and intramol. cyclocondensation of, dioxanone from)

RN 136683-76-6 HCAPLUS

CN Acetic acid, 2,2'-[[1,3-bis(1-hydroxy-2-methyl-2-propenyl)-1,3-propanediyl]bis(oxy)]bis-, bis(1,1-dimethylethyl) ester, [1R-[1R\*(R\*),3S\*(R\*)]]- (9CI) (CA. INDEX NAME)



L12 ANSWER 23 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1990:417428 HCAPLUS  
 DOCUMENT NUMBER: 113:17428  
 TITLE: Pharmacokinetic studies of propiverine hydrochloride.  
 (2). Metabolism in rats after single oral  
 administration  
 AUTHOR(S): Yamamoto, Yoshio; Minami, Yoshinori; Yoshida,  
 Masahiko; Tsuda, Masuhiro; Uda, Kazuhiko; Shindo,  
 Takashi; Umeno, Yukihiro; Kawaguchi, Yasuro  
 CORPORATE SOURCE: Biol. Res. Lab., Taiho Pharm. Co. Ltd., Kawauchi,  
 771-01, Japan  
 SOURCE: Yakubutsu Dotai (1989), 4(5), 553-61  
 CODEN: YADOEL; ISSN: 0916-1139  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Japanese  
 GI

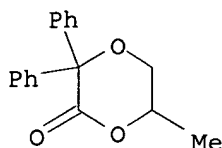


AB The biotransformation of propiverine hydrochloride [1-methyl-4-piperidyl diphenylpropoxyacetate hydrochloride, P-4] (I-HCl) was studied in rats after oral administration of P-4. The presence of nine metabolites of P-4 was found in the urine and the bile after oral administration; they were identified based on a 1H-NMR and mass spectra by direct comparison with authentic compds. Portal plasma concentration of unchanged drug after oral administration of 14C-P-4 was 4 .apprx. 16 times higher than in peripheral plasma, indicating the presence of the hepatic first pass effect. After oral administration of 14C-P-4, 1-methyl-4-piperidyl benzilate N-oxide was excreted mainly in the urine, whereas unidentified polar metabolites, benzoic acid, diphenyl-1-(2-hydroxy) propoxyacetic acid, 2,2-diphenyl-5-methyl-1, 4-dioxan-3-one and 1-methyl-4-piperidyl diphenyl-(2-carboxy) ethoxyacetate were excreted in the bile. Conjugates (glucuronide and sulfate) accounting for only 3 .apprx. 4% of the administered dose were detected in the urine and bile.

IT 111051-50-4 127842-32-4  
 RL: BIOL (Biological study)  
 (as propiverine metaboloid)

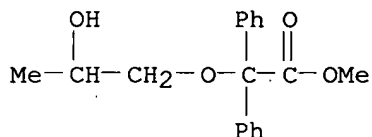
RN 111051-50-4 HCAPLUS

CN 1,4-Dioxan-2-one, 6-methyl-3,3-diphenyl- (9CI) (CA INDEX NAME)



RN 127842-32-4 HCAPLUS

CN Benzeneacetic acid,  $\alpha$ -(2-hydroxypropoxy)- $\alpha$ -phenyl-, methyl ester (9CI) (CA INDEX NAME)



L12 ANSWER 24 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1989:478540 HCAPLUS

DOCUMENT NUMBER: 111:78540

TITLE: The synthesis of acyclonucleoside hydroxamic acids as inhibitors of ribonucleotide reductase

AUTHOR(S): Farr, Robert A.; Bey, Philippe; Sunkara, Prasad S.; Lippert, Bruce J.

CORPORATE SOURCE: Merrell Dow Res. Inst., Cincinnati, OH, 45215, USA

SOURCE: Journal of Medicinal Chemistry (1989), 32(8), 1879-85

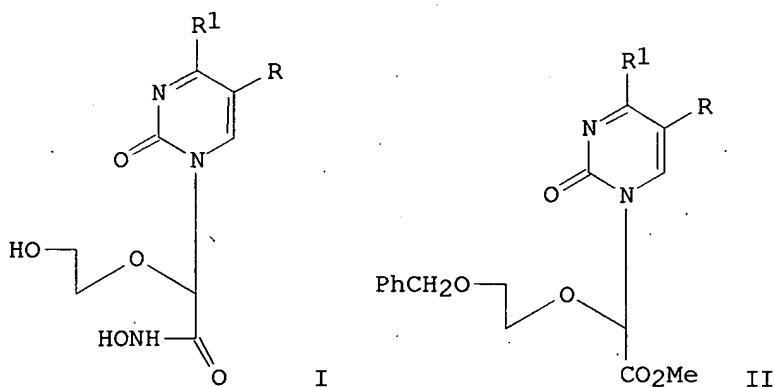
CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 111:78540

GI



AB N-Hydroxy- $\alpha$ -(2-hydroxyethoxy)-1(2H)-pyrimidineacetamides I (R = H, F, R1 = OH; R = H, R1 = NH2) were synthesized as potential antitumor agents whose mechanism of action would involve inhibition of ribonucleoside diphosphate reductase (EC 1.17.4.1). The key intermediates acyclonucleoside esters II (R = H, F, R1 = OH; R = H, R1 = NHAc) were

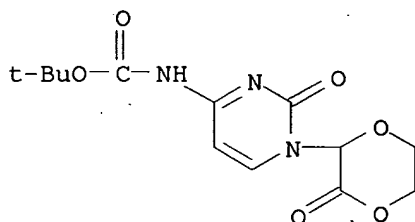
prepared by the SnCl<sub>4</sub> catalyzed reaction of Me chloro-[2-(phenylmethoxy)ethoxy]acetate with various silylated pyrimidines, generated in situ from the bases and bis(trimethylsilyl)acetamide. In vitro I were 3-10-fold less potent than hydroxyurea against calf thymus cytidine diphosphate (CDP) reductase. I (R = F, R1 = OH) is nearly equipotent with hydroxyurea in inhibiting the growth of HeLa cells, while I (R = H, R1 = OH) a much weaker inhibitor and I (R = H, R1 = NH<sub>2</sub>) is devoid of activity at 200 µg/mL.

IT 121653-89-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and deprotection of)

RN 121653-89-2 HCAPLUS

CN Carbamic acid, [1,2-dihydro-2-oxo-1-(3-oxo-1,4-dioxan-2-yl)-4-pyrimidinyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

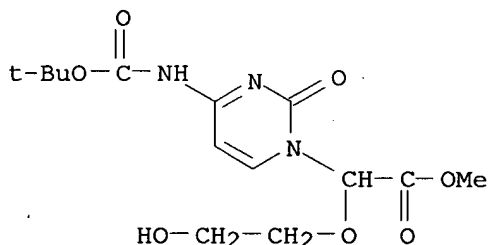


IT 121653-88-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and lactonization of)

RN 121653-88-1 HCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 4-[[[1,1-dimethylethoxy)carbonyl]amino]-α-(2-hydroxyethoxy)-2-oxo-, methyl ester (9CI) (CA INDEX NAME)

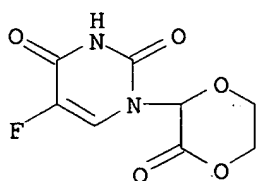


IT 121653-82-5P 121653-91-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and reaction of, with hydroxylamine)

RN 121653-82-5 HCAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 5-fluoro-1-(3-oxo-1,4-dioxan-2-yl)- (9CI) (CA INDEX NAME)

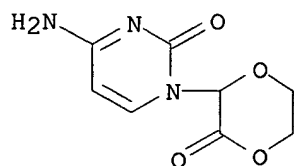


RN 121653-91-6 HCAPLUS  
CN 2(1H)-Pyrimidinone, 4-amino-1-(3-oxo-1,4-dioxan-2-yl)-,  
mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 121653-90-5

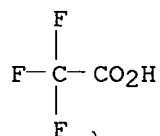
CMF C8 H9 N3 O4



CM 2

CRN 76-05-1

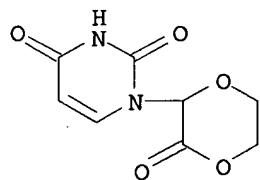
CMF C2 H F3 O2



IT 121653-81-4P 121653-87-0P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

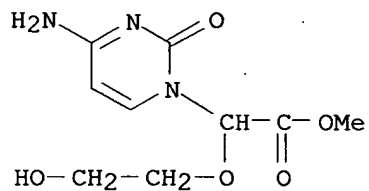
RN 121653-81-4 HCAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-(3-oxo-1,4-dioxan-2-yl)- (9CI) (CA INDEX NAME)

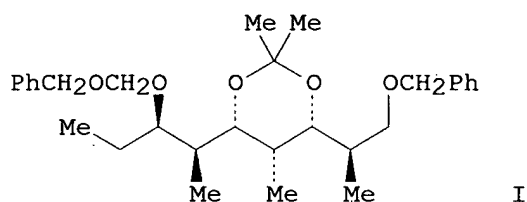


RN 121653-87-0 HCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 4-amino-α-(2-hydroxyethoxy)-2-oxo-,  
methyl ester (9CI) (CA INDEX NAME)

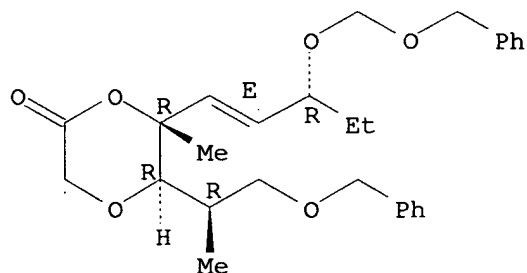


L12 ANSWER 25 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1988:406271 HCAPLUS  
 DOCUMENT NUMBER: 109:6271  
 TITLE: An alternate route to the C(7)-C(13) subunit of  
 erythronolide B via a hydropyran template  
 AUTHOR(S): Burke, Steven D.; Chandler, Arthur C., III; Nair,  
 Mangalam S.; Campopiano, Onorato  
 CORPORATE SOURCE: Dep. Chem., Univ. South Carolina, Columbia, SC, 29208,  
 USA  
 SOURCE: Tetrahedron Letters (1987), 28(36), 4147-8  
 CODEN: TELEAY; ISSN: 0040-4039  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 109:6271  
 GI



AB (R)-3-Benzyloxy-2-methylpropionaldehyde was converted to the erythronolide  
 B C(7)-C(13) subunit I in 15% overall yield. Chelation-controlled  
 carbonyl addns. and a dioxanone-to-dihydropyran Claisen rearrangement are  
 key steps.  
 IT 114826-19-6P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and Claisen rearrangement of)  
 RN 114826-19-6 HCAPLUS  
 CN 1,4-Dioxan-2-one, 6-methyl-5-[1-methyl-2-(phenylmethoxy)ethyl]-6-[3-  
 [(phenylmethoxy)methoxy]-1-pentenyl]-, [5R-[5 $\alpha$ (R\*), 6 $\beta$ (1E, 3R\*)]]-  
 (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry as shown.



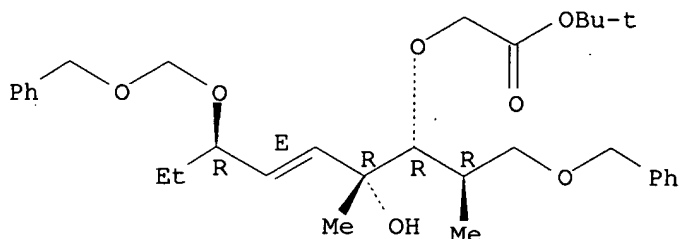
IT 114826-18-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and lactonization of)

RN 114826-18-5 HCAPLUS

CN Acetic acid, [[2-hydroxy-2-methyl-1-[1-methyl-2-(phenylmethoxy)ethyl]-5-[(phenylmethoxy)methoxy]-3-heptenyl]oxy]-, 1,1-dimethylethyl ester, [1R-[1R\*(R\*),2R\*,3E,5R\*]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L12 ANSWER 26 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1987:119510 HCAPLUS

DOCUMENT NUMBER: 106:119510

TITLE: An enolate Claisen route to C-pyranosides. Development and application to an ionophore synthon

AUTHOR(S): Burke, Steven D.; Armistead, David M.; Schoenen, Frank J.; Fevig, John M.

CORPORATE SOURCE: Dep. Chem., Univ. South Carolina, Columbia, SC, 29208, USA

SOURCE: Tetrahedron (1986), 42(11), 2787-801

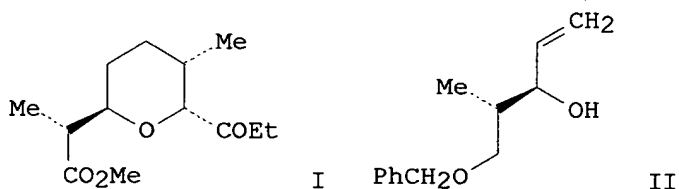
CODEN: TETRAB; ISSN: 0040-4020

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 106:119510

GI



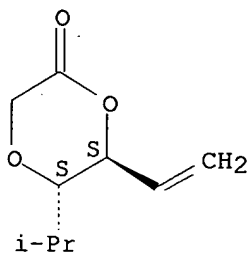
AB A new method for the stereoselective synthesis of dihydropyrans of various substitution patterns involves the Ireland ester enolate Claisen rearrangements of 6-alkenyl-1,4-dioxan-2-ones. The method was applied to an enantioselective synthesis of the left-wing tetrahydropyran portion I of the ionophore antibiotic indanomycin. The synthetic sequence proceeded in >29% overall yield in 12 steps from the allylic alc. II, thus underscoring its utility.

IT 92420-30-9P 92420-31-0P 92420-32-1P  
92420-33-2P 92420-34-3P 92420-35-4P  
92420-36-5P 92420-37-6P 92420-38-7P  
92471-18-6P 92471-19-7P 96720-60-4P  
107134-01-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and Claisen rearrangement of)

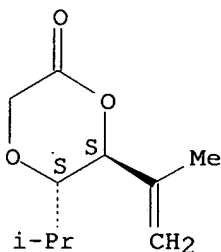
RN 92420-30-9 HCAPLUS  
CN 1,4-Dioxan-2-one, 6-ethenyl-5-(1-methylethyl)-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.



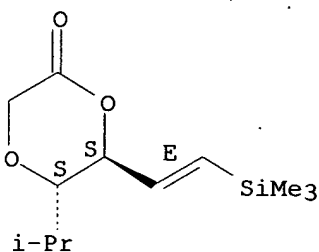
RN 92420-31-0 HCAPLUS  
CN 1,4-Dioxan-2-one, 6-(1-methylethenyl)-5-(1-methylethyl)-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.



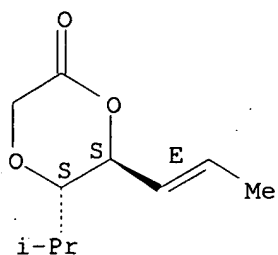
RN 92420-32-1 HCAPLUS  
CN 1,4-Dioxan-2-one, 5-(1-methylethyl)-6-[2-(trimethylsilyl)ethenyl]-, [5 $\alpha$ ,6 $\beta$ (E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



RN 92420-33-2 HCAPLUS  
CN 1,4-Dioxan-2-one, 5-(1-methylethyl)-6-(1-propenyl)-, [5 $\alpha$ ,6 $\beta$ (E)]- (9CI) (CA INDEX NAME)

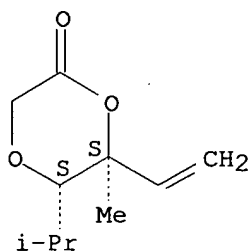
Relative stereochemistry.  
Double bond geometry as shown.



RN 92420-34-3 HCAPLUS

CN 1,4-Dioxan-2-one, 6-ethenyl-6-methyl-5-(1-methylethyl)-, trans- (9CI) (CA INDEX NAME)

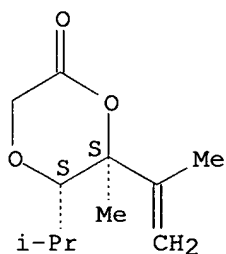
Relative stereochemistry.



RN 92420-35-4 HCAPLUS

CN 1,4-Dioxan-2-one, 6-methyl-6-(1-methylethenyl)-5-(1-methylethyl)-, trans- (9CI) (CA INDEX NAME)

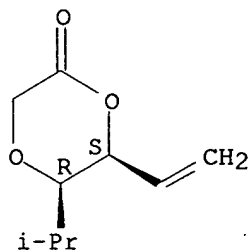
Relative stereochemistry.



RN 92420-36-5 HCAPLUS

CN 1,4-Dioxan-2-one, 6-ethenyl-5-(1-methylethyl)-, cis- (9CI) (CA INDEX NAME)

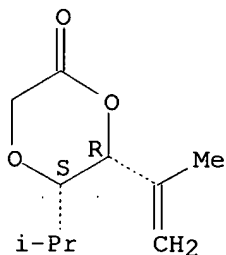
Relative stereochemistry.



RN 92420-37-6 HCAPLUS

CN 1,4-Dioxan-2-one, 6-(1-methylethenyl)-5-(1-methylethyl)-, cis- (9CI) (CA INDEX NAME)

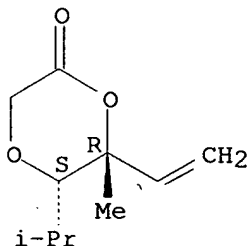
Relative stereochemistry.



RN 92420-38-7 HCAPLUS

CN 1,4-Dioxan-2-one, 6-ethenyl-6-methyl-5-(1-methylethyl)-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

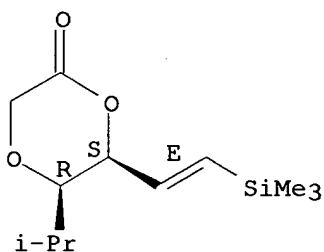


RN 92471-18-6 HCAPLUS

CN 1,4-Dioxan-2-one, 5-(1-methylethyl)-6-[2-(trimethylsilyl)ethenyl]-, [5 $\alpha$ ,6 $\alpha$ (E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.

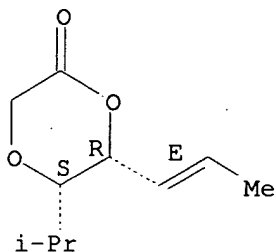


RN 92471-19-7 HCAPLUS

CN 1,4-Dioxan-2-one, 5-(1-methylethyl)-6-(1-propenyl)-, [5 $\alpha$ ,6 $\alpha$ (E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

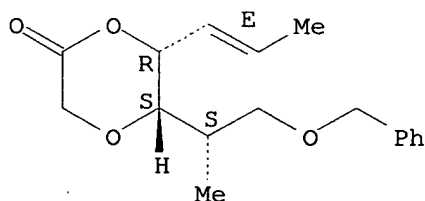
Double bond geometry as shown.



RN 96720-60-4 HCAPLUS

CN 1,4-Dioxan-2-one, 5-[1-methyl-2-(phenylmethoxy)ethyl]-6-(1-propenyl)-, [5S-[5 $\alpha$ (R\*),6 $\alpha$ (E)]]- (9CI) (CA INDEX NAME)

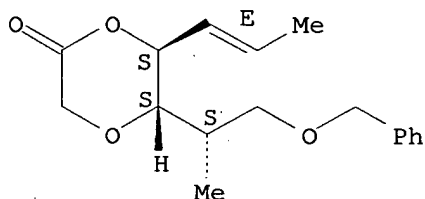
Absolute stereochemistry.  
Double bond geometry as shown.



RN 107134-01-0 HCAPLUS

CN 1,4-Dioxan-2-one, 5-[1-methyl-2-(phenylmethoxy)ethyl]-6-(1-propenyl)-, [5S-[5 $\alpha$ (R\*),6 $\beta$ (E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

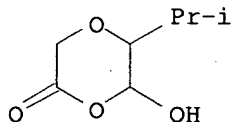


IT 92420-51-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and Grignard reactions of)

RN 92420-51-4 HCAPLUS

CN 1,4-Dioxan-2-one, 6-hydroxy-5-(1-methylethyl)- (9CI) (CA INDEX NAME)



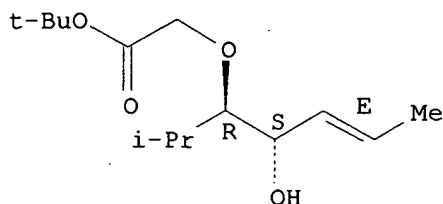
IT 92420-55-8P 92456-09-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and hydrolysis of)

RN 92420-55-8 HCAPLUS

CN Acetic acid, [[2-hydroxy-1-(1-methylethyl)-3-pentenyl]oxy]-, 1,1-dimethylethyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

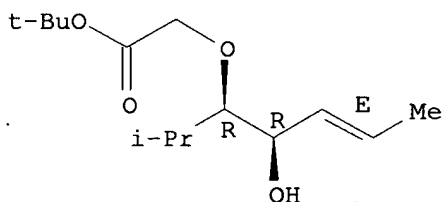
Relative stereochemistry.  
Double bond geometry as shown.



RN 92456-09-2 HCAPLUS

CN Acetic acid, [[2-hydroxy-1-(1-methylethyl)-3-pentenyl]oxy]-, 1,1-dimethylethyl ester, [R\*,R\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



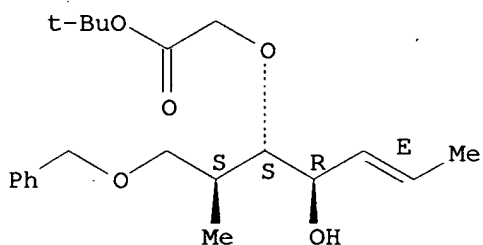
IT 96789-96-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and lactonization of)

RN 96789-96-7 HCAPLUS

CN Acetic acid, [[2-hydroxy-1-[1-methyl-2-(phenylmethoxy)ethyl]-3-pentenyl]oxy]-, 1,1-dimethylethyl ester, [1S-[1R\*(R\*),2S\*,3E]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



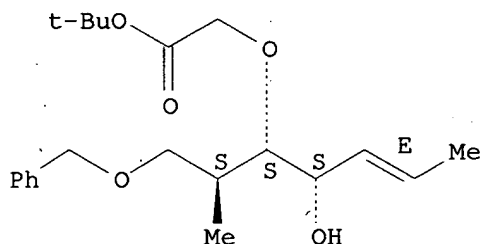
IT 96720-58-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and oxidation of)

RN 96720-58-0 HCAPLUS

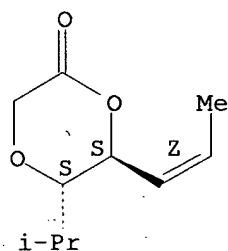
CN Acetic acid, [[2-hydroxy-1-[1-methyl-2-(phenylmethoxy)ethyl]-3-pentenyl]oxy]-, 1,1-dimethylethyl ester, [1S-[1R\*(R\*),2R\*,3E]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



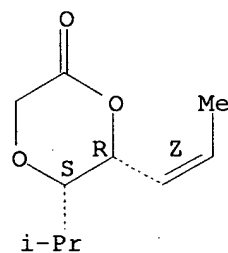
IT 107133-99-3P 107134-00-9P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 107133-99-3 HCAPLUS  
CN 1,4-Dioxan-2-one, 5-(1-methylethyl)-6-(1-propenyl)-, [5 $\alpha$ ,6 $\beta$ (Z)]-  
(9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



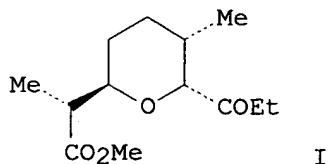
RN 107134-00-9 HCAPLUS  
CN 1,4-Dioxan-2-one, 5-(1-methylethyl)-6-(1-propenyl)-,  
[5 $\alpha$ ,6 $\alpha$ (Z)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



L12 ANSWER 27 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1985:422333 HCAPLUS  
DOCUMENT NUMBER: 103:22333  
TITLE: Ionophore synthesis. An enantioselective route to the  
left-wing of indanomycin (X-14547A)  
AUTHOR(S): Burke, Steven D.; Armistead, David M.; Fevig, John M.  
CORPORATE SOURCE: Dep. Chem., Univ. South Carolina, Columbia, SC, 29208,

SOURCE: USA  
Tetrahedron Letters (1985), 26(9), 1163-6  
CODEN: TELEAY; ISSN: 0040-4039  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 103:22333  
GI



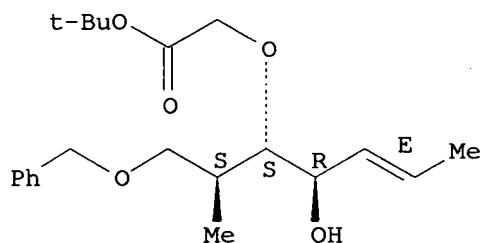
AB An enantioselective synthesis of the tetrahydropyran I of the ionophore X-14547A uses stereoselective 1,2-carbonyl addns. and an oxapyranone-to-dihydropyran enolate Claisen rearrangement as key stereocontrol elements.

IT 96789-96-7P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and lactonization of)

RN 96789-96-7 HCAPLUS

CN Acetic acid, [[2-hydroxy-1-[1-methyl-2-(phenylmethoxy)ethyl]-3-pentenyl]oxy]-, 1,1-dimethylethyl ester, [1S-[1R\*(R\*),2S\*,3E]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

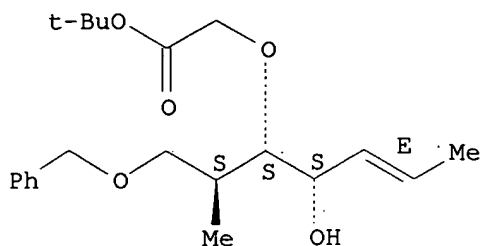


IT 96720-58-0P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and oxidation of)

RN 96720-58-0 HCAPLUS

CN Acetic acid, [[2-hydroxy-1-[1-methyl-2-(phenylmethoxy)ethyl]-3-pentenyl]oxy]-, 1,1-dimethylethyl ester, [1S-[1R\*(R\*),2R\*,3E]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



IT 96720-60-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

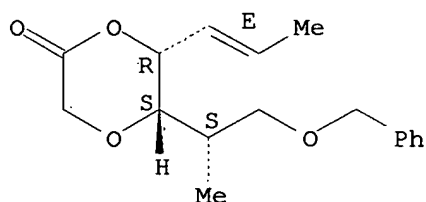
(preparation and rearrangement of)

RN 96720-60-4 HCAPLUS

CN 1,4-Dioxan-2-one, 5-[1-methyl-2-(phenylmethoxy)ethyl]-6-(1-propenyl)-, [5S-[5α(R\*),6α(E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L12 ANSWER 28 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1984:592333 HCAPLUS

DOCUMENT NUMBER: 101:192333

TITLE: Polysubstituted dihydropyrans via the enolate Claisen rearrangement. A stereocontrolled route to C-pyranosides

AUTHOR(S): Burke, Steven D.; Armistead, David M.; Schoenen, Frank J.

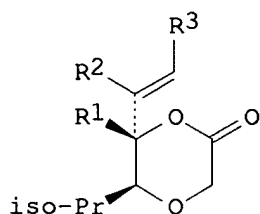
CORPORATE SOURCE: Dep. Chem., Univ. South Carolina, Columbia, SC, 29208, USA

SOURCE: Journal of Organic Chemistry (1984), 49(22), 4320-2  
CODEN: JOCEAH; ISSN: 0022-3263

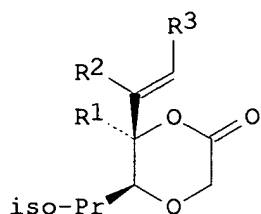
DOCUMENT TYPE: Journal

LANGUAGE: English

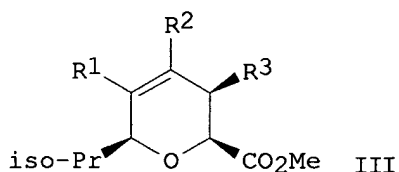
GI



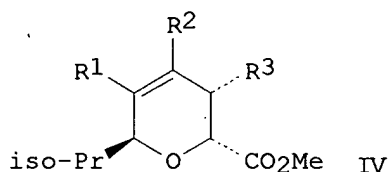
I



II



III



IV

AB A new method for the stereoselective synthesis of dihydropyrans of a variety of substitution pattern is described. The method invoked [3,3] sigmatropic reorganizations of 6-alkenyl-4-oxapyran-2-ones of general structure I or II ( $R_1 = \text{H, Me}$ ;  $R_2 = \text{H, Me}$ ;  $R_3 = \text{H, SiMe}_3, \text{Me}$ ) to the product dihydropyrans (III or IV resp.) via a modification of the enolate Claisen rearrangement. Isolated yields in this key step ranged from 52 to 91% for the eleven cases examined. The substrate oxapyranones were prepared by sequential 1,2-carbonyl addns. with vinylmetallic and/or hydride delivery reagents. Observed stereoselectivities for these processes ranged from 1.53:1 to > 100:1.

IT 92420-55-8P 92456-09-2P

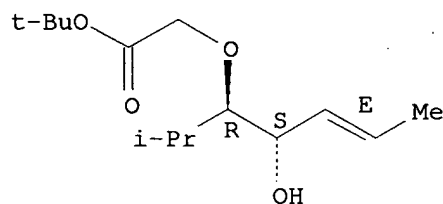
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and lactonization of)

RN 92420-55-8 HCAPLUS

CN Acetic acid, [[2-hydroxy-1-(1-methylethyl)-3-pentenyl]oxy]-, 1,1-dimethylethyl ester, [ $R^*, S^*$ -(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.

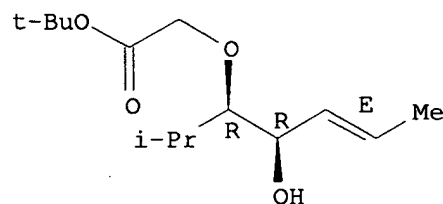


RN 92456-09-2 HCAPLUS

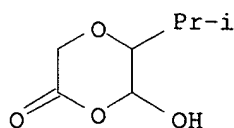
CN Acetic acid, [[2-hydroxy-1-(1-methylethyl)-3-pentenyl]oxy]-, 1,1-dimethylethyl ester, [ $R^*, R^*$ -(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.

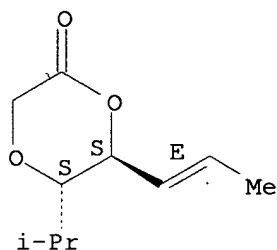


IT 92420-51-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and reaction of, with vinylmagnesium bromide)  
 RN 92420-51-4 HCAPLUS  
 CN 1,4-Dioxan-2-one, 6-hydroxy-5-(1-methylethyl)- (9CI) (CA INDEX NAME)



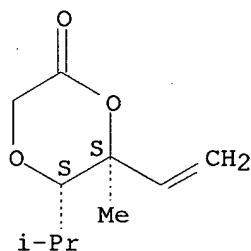
IT 92420-33-2P 92420-34-3P 92420-35-4P  
 92420-36-5P 92420-37-6P 92420-38-7P  
 92471-18-6P 92471-19-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and rearrangement of, dihydropyran derivative from)  
 RN 92420-33-2 HCAPLUS  
 CN 1,4-Dioxan-2-one, 5-(1-methylethyl)-6-(1-propenyl)-, [5 $\alpha$ ,6 $\beta$ (E)]-  
 (9CI) (CA INDEX NAME)

Relative stereochemistry.  
 Double bond geometry as shown.



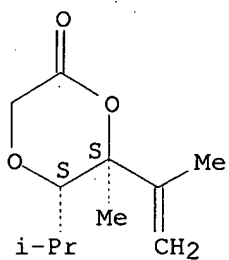
RN 92420-34-3 HCAPLUS  
 CN 1,4-Dioxan-2-one, 6-ethenyl-6-methyl-5-(1-methylethyl)-, trans- (9CI) (CA  
 INDEX NAME)

Relative stereochemistry.



RN 92420-35-4 HCAPLUS  
 CN 1,4-Dioxan-2-one, 6-methyl-6-(1-methylethenyl)-5-(1-methylethyl)-, trans-  
 (9CI) (CA INDEX NAME)

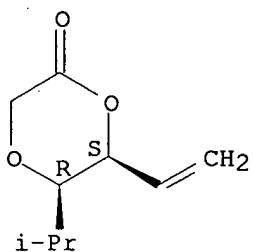
Relative stereochemistry.



RN 92420-36-5 HCAPLUS

CN 1,4-Dioxan-2-one, 6-ethenyl-5-(1-methylethyl)-, cis- (9CI) (CA INDEX NAME)

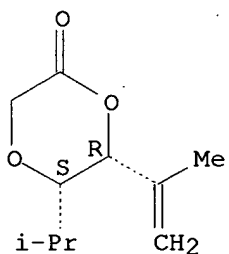
Relative stereochemistry.



RN 92420-37-6 HCAPLUS

CN 1,4-Dioxan-2-one, 6-(1-methylethenyl)-5-(1-methylethyl)-, cis- (9CI) (CA INDEX NAME)

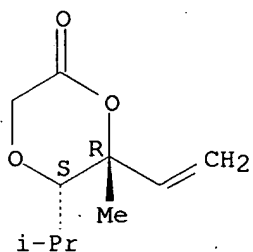
Relative stereochemistry.



RN 92420-38-7 HCAPLUS

CN 1,4-Dioxan-2-one, 6-ethenyl-6-methyl-5-(1-methylethyl)-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

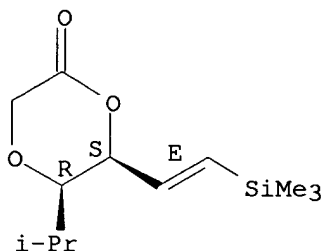


RN 92471-18-6 HCAPLUS

CN 1,4-Dioxan-2-one, 5-(1-methylethyl)-6-[2-(trimethylsilyl)ethenyl]-,  
[5 $\alpha$ ,6 $\alpha$ (E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.

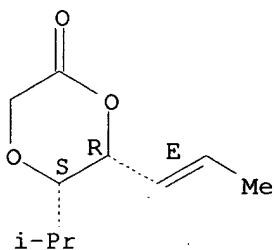


RN 92471-19-7 HCAPLUS

CN 1,4-Dioxan-2-one, 5-(1-methylethyl)-6-(1-propenyl)-,  
[5 $\alpha$ ,6 $\alpha$ (E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.



IT 92420-30-9P 92420-31-0P

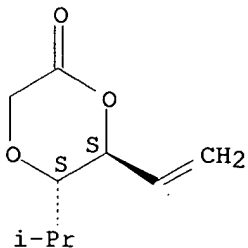
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)

(preparation and rearrangement of, dihydropyran derivs. from)

RN 92420-30-9 HCAPLUS

CN 1,4-Dioxan-2-one, 6-ethenyl-5-(1-methylethyl)-, trans- (9CI) (CA INDEX  
NAME)

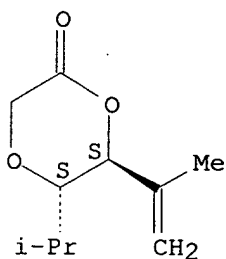
Relative stereochemistry.



RN 92420-31-0 HCAPLUS

CN 1,4-Dioxan-2-one, 6-(1-methylethenyl)-5-(1-methylethyl)-, trans- (9CI)  
(CA INDEX NAME)

Relative stereochemistry.



IT 92420-32-1

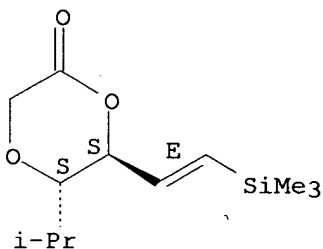
RL: RCT (Reactant); RACT (Reactant or reagent)  
(rearrangement of, dihydropyranan derivs. from)

RN 92420-32-1 HCAPLUS

CN 1,4-Dioxan-2-one, 5-(1-methylethyl)-6-[2-(trimethylsilyl)ethenyl]-,  
[5α,6β(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.



L12 ANSWER 29 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1976:73676 HCAPLUS

DOCUMENT NUMBER: 84:73676

TITLE: Ether diester derivatives of p-dioxanone

INVENTOR(S): Snapp, Thomas C., Jr.; Blood, Alden E.

PATENT ASSIGNEE(S): Eastman Kodak Co., USA

SOURCE: U.S., 4 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

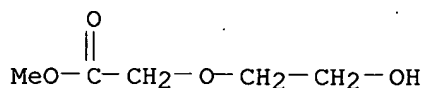
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

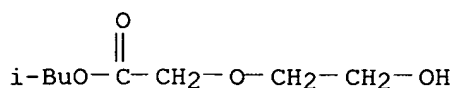
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3929847	A	19751230	US 1974-508314	19740925
PRIORITY APPLN. INFO.:			US 1974-508314	A 19740925
AB Six ether esters, R1CO2CH2CH2OCH2CO2R [R1 = Me, Pr, BuCH2Et, Ph; R = Me, Bu, Me2CHCH2, Me(CH2)3CH2EtCH2], useful as plasticizers for polyvinyl chloride, viscosity improvers for motor oil and brake fluid, and as solvents, were prepared by treating p-dioxan-2-one with ROH at .apprx.50-100° (with or without a catalyst, e.g., pyridine) and esterifying the resultant HOCH2CH2OCH2CO2R with R1CO2H or its anhydride.				
IT 58349-37-4P 58349-40-9P				
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)				
(preparation and esterification of)				
RN 58349-37-4 HCAPLUS				

CN Acetic acid, (2-hydroxyethoxy)-, methyl ester (9CI) (CA INDEX NAME)



RN 58349-40-9 HCAPLUS

CN Acetic acid, (2-hydroxyethoxy)-, 2-methylpropyl ester (9CI) (CA INDEX NAME)

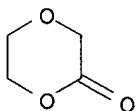


IT 3041-16-5

RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with alcs.)

RN 3041-16-5 HCAPLUS

CN 1,4-Dioxan-2-one (9CI) (CA INDEX NAME)



L12 ANSWER 30 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1975:73649 HCAPLUS

DOCUMENT NUMBER: 82:73649

TITLE: Aromatic polyesters with high molecular weight

INVENTOR(S): Shima, Takeo; Urasaki, Takanori; Kobayashi, Takayuki;  
Oka, Isao

PATENT ASSIGNEE(S): Teijin Ltd.

SOURCE: Jpn. Tokkyo Koho, 7 pp.

CODEN: JAXXAD

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 49005629	B	19740208	JP 1970-20609	19700311

PRIORITY APPLN. INFO.: JP 1970-20609 19700311

AB Aromatic polyesters with high mol. weight and low carboxy end group content were

prepared by adding an aryl terephthalate and an ester from ethylene glycol and oxalic acid or malonic acid derivative at an intermediate stage of the polyester synthesis. For example, di-Me terephthalate 97, ethylene glycol 69, Mn(OAc)2.4H2O 0.049, and Sb2O3 0.04 part were heated at 160-230° with MeOH distillation, treated with 0.02 part H3PO3, heated at 280° under N for 30 min, at 280°/15 mmHg for 30 min, and at 280°/0.15 mmHg for 60 min, treated with 0.89 part bis(2-hydroxyethyl) oxalate (I) and 1.2 parts di-Ph terephthalate, and heated at 280°/0.2 mmHg for 30 min to give a polyester [ 53417-68-8] with lower carboxy end group content than that prepared

without I and/or II and higher mol. weight than that prepared without I + II or II.

IT 53417-64-4P 53417-68-8P

RL: IMF (Industrial manufacture); PREP (Preparation)

(manufacture of, with high mol. weight and low carboxy end group content)

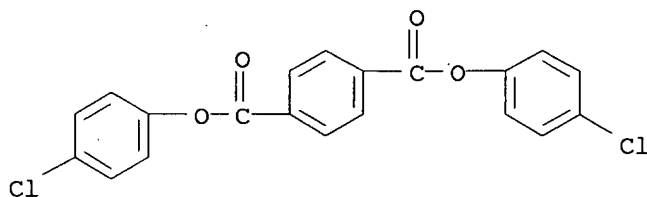
RN 53417-64-4 HCAPLUS

CN 1,3-Benzenedicarboxylic acid, dimethyl ester, polymer with  
bis(4-chlorophenyl) 1,4-benzenedicarboxylate, dimethyl  
1,4-benzenedicarboxylate, 1,4-dioxane-2,3-dione and 1,2-ethanediol (9CI)  
(CA INDEX NAME)

CM 1

CRN 24707-03-7

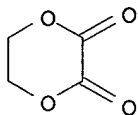
CMF C20 H12 Cl2 O4



CM 2

CRN 3524-70-7

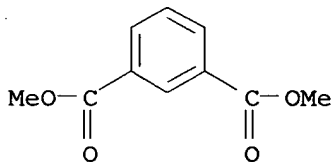
CMF C4 H4 O4



CM 3

CRN 1459-93-4

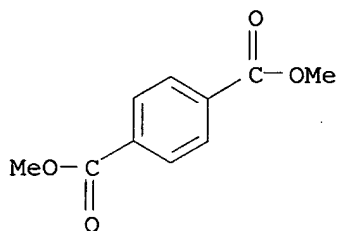
CMF C10 H10 O4



CM 4

CRN 120-61-6

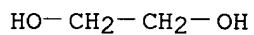
CMF C10 H10 O4



CM 5

CRN 107-21-1

CMF C2 H6 O2



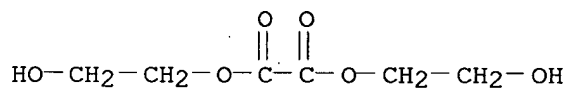
RN 53417-68-8 HCAPLUS

CN 1,4-Benzenedicarboxylic acid, dimethyl ester, polymer with bis(2-hydroxyethyl) ethanedioate, diphenyl 1,4-benzenedicarboxylate and 1,2-ethanediol (9CI) (CA INDEX NAME)

CM 1

CRN 25781-56-0

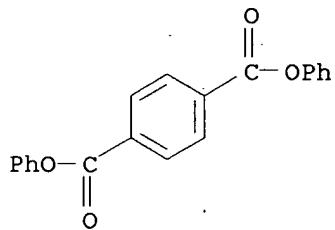
CMF C6 H10 O6



CM 2

CRN 1539-04-4

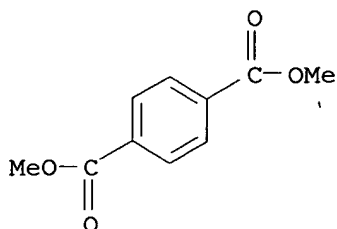
CMF C20 H14 O4



CM 3

CRN 120-61-6

CMF C10 H10 O4



CM 4

CRN 107-21-1

CMF C2 H6 O2

HO-CH<sub>2</sub>-CH<sub>2</sub>-QH

L12 ANSWER 31 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1973:147370 HCAPLUS

DOCUMENT NUMBER: 78:147370

TITLE: Ether carboxylic acids

INVENTOR(S): Borggreffe, Gerhard

PATENT ASSIGNEE(S): Henkel und Cie. G.m.b.H.

SOURCE: Ger. Offen., 12 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2142207	A1	19730301	DE 1971-2142207	19710823
DE 2142207	C2	19831222		
US 4002676	A	19770111	US 1972-221816	19720128
NL 7201313	A	19720807	NL 1972-1313	19720201
NL 7201312	A	19730227	NL 1972-1312	19720201
FR 2150274	A1	19730406	FR 1972-3431	19720202
BR 7200585	D0	19730823	BR 1972-585	19720202
GB 1339111	A	19731128	GB 1972-4790	19720202
IT 964050	B	19740121	IT 1972-28266	19720818
BE 787845	A1	19730222	BE 1972-121206	19720822
AT 323708	B	19750725	AT 1972-7254	19720822
CH 574893	A5	19760430	CH 1972-12421	19720822
JP 48029718	A	19730419	JP 1972-84407	19720823
JP 57060326	B	19821218		
ZA 7205797	A	19730530	ZA 1972-5797	19720823

PRIORITY APPLN. INFO.:

DE 1971-2104976	A	19710203
DE 1971-2142207	A	19710823
DE 1971-2153459	A	19711027
DE 1971-2153460	A	19711027

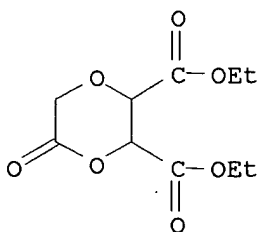
AB HO<sub>2</sub>CCH<sub>2</sub>OCH(CO<sub>2</sub>H)CH(OH)CO<sub>2</sub>H and HO<sub>2</sub>CCH<sub>2</sub>CH(CH<sub>2</sub>OH)OCH<sub>2</sub>CO<sub>2</sub>H (I), useful as Ca complexing agents. were prepared by reaction of di-Et tartrate or HOCH<sub>2</sub>CH(CH<sub>2</sub>Cl)OH (II), resp., with N<sub>2</sub>CHCO<sub>2</sub>Et and saponification of the esters formed. Thus, reaction of II with N<sub>2</sub>CHCO<sub>2</sub>Et in BF<sub>3</sub>·Et<sub>2</sub>O-containing CHCl<sub>3</sub> at -20° gave 55% EtO<sub>2</sub>CCH<sub>2</sub>CH(CH<sub>2</sub>Cl)OCH<sub>2</sub>CO<sub>2</sub>Et which was saponified with KOH at 80° to give partially lactonized I.

IT 40774-92-3P 40774-93-4P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

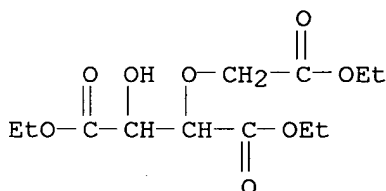
RN 40774-92-3 HCAPLUS

CN 1,4-Dioxane-2,3-dicarboxylic acid, 5-oxo-, diethyl ester (9CI) (CA INDEX NAME)



RN 40774-93-4 HCAPLUS

CN Butanedioic acid, 2-(2-ethoxy-2-oxoethoxy)-3-hydroxy-, diethyl ester (9CI)  
(CA INDEX NAME)



L12 ANSWER 32 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1963:59741 HCAPLUS

DOCUMENT NUMBER: 58:59741

ORIGINAL REFERENCE NO.: 58:10196g-h,10197a-c

TITLE:  $\alpha$ -Substituted derivatives of normal aliphatic  
long-chain acids

AUTHOR(S): Piekarski, Salomon

CORPORATE SOURCE: C.N.R.S., Bellevue, Fr.

SOURCE: Oleagineux (1962), 17, 785-9

CODEN: OLEAAF; ISSN: 0030-2082

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB Alkylpiperazinones (I) were prepared by treatment of ( $\alpha$ -bromohexanoic to -octadecanoic acid esters with ethylenediamine (II) hydrate.

$\alpha$ -Bromomyristic acid Me ester (10.3 g.), 4 g. II hydrate, and 75 ml.

EtOH was kept overnight at 40°. The mixture was then refluxed 2 hrs.

and EtOH in excess distilled to yield the I HBr salt on cooling; the I or I

HBr salt could be recrystd. from H<sub>2</sub>O (alkyl of I HBr salt = C<sub>14</sub>H<sub>29</sub> and

C<sub>16</sub>H<sub>33</sub>), from Bu<sub>2</sub>O (from I, alkyl = C<sub>10</sub>H<sub>21</sub>) or from mixts. of petr.-ether

and Me<sub>2</sub>CO. The following I were prepared (alkyl group and m.p. given): Bu,

liquid; C<sub>6</sub>H<sub>13</sub>, liquid; C<sub>8</sub>H<sub>17</sub> 58-60°; C<sub>10</sub>H<sub>21</sub>, 70-70.8°;

C<sub>12</sub>H<sub>25</sub>, 79-80°; C<sub>14</sub>H<sub>29</sub>, 87.7-88.5°; C<sub>16</sub>H<sub>33</sub>, 90-1°.

The mol. extinction coeffs. of the benzenesulfonamide derivs. were measured at  $\lambda$  231 m $\mu$  (alkyl group, m.p. and  $\epsilon$  M given):

Bu, 101.7-2.7°, 5590; C<sub>6</sub>H<sub>13</sub>, 106.3-7.6°, 5.400; C<sub>8</sub>H<sub>17</sub>,

112-13°, 5.490; C<sub>10</sub>H<sub>21</sub>, 111.5-12.5°, 5.550; C<sub>12</sub>H<sub>25</sub>,

114.8-15.3°, 5.740; C<sub>14</sub>H<sub>29</sub>, 115.5-16.1°, 5.550; C<sub>16</sub>H<sub>33</sub>,

117-18°, 5.580. The mixture of  $\alpha$ -bromocapric acid Me ester (5

g.), 3.1 g. o-phenylenediamine, and 40 ml. EtOH was kept at

60° overnight under N and then refluxed 4 hrs. (N stream). EtOH

was distilled, the product dissolved in C6H6 and washed with diluted HCl. The raw product obtained was recrystd. from EtOH to yield octylbenzopiperazinone. Similarly, the following alkylbenzopiperazinones were prepared (alkyl group, m.p., and  $\epsilon$  M at 231 m $\mu$  given): C6H13, 127-8°, 18.800; C8H17, 123-4°, 18.400; C12H25, 121-2°, 18.700; C14H29, 118-19.5° 18.650. A mixture of distilled glycol (17.4 g.), 3.8 g. Na, and 125 ml. anhydrous dioxane was heated with stirring to disperse the alcoholate formed. After complete reaction, the flask was put in an oil bath at 61° and 37.45 g.  $\alpha$ -bromocaprylic acid Me ester in 50 ml. anhydrous dioxane added with vigorous stirring. The mixture was stirred 5 hrs. The reaction was stopped by addition of H2O and neutralization with concentrated HNO3. The organic fraction

was dissolved in Et2O, washed with H2O, and dried; in a 50 to 120-mg. sample, the residual Br was converted to a metal salt by saponification and determined

with KSCN after addition of AgNO3 in known excess; the OH number was also determined

A mixture of the ester alc. (4.1 g.) and 50 ml. dioxane or toluene was refluxed, and samples were periodically taken to determine the alc. function by acetylation. The following ester alcs. were prepared (alkyl group, OH and saponification nos. given): C6H13, 254, 256; C10H21, 207, 202. The following alkyl-dioxanones were prepared (alkyl group, m.p., and saponification number given): Et,

liquid, 439; Bu, liquid, 352; C8H17, 56-7°, 261; C10H21, 62-3°, 233; C12H25, 68-9°, 205; C14H29, 73.5-4.5°, 187; C16H33, 77-8.5°, 170. Tetradecylpiperazinone (10 mg./l.) inhibited the development of Staphylococcus aureus during 48 hrs. The alkylbenzopiperazinones gave 3  $\lambda$  231, 282, and 332 m $\mu$ .

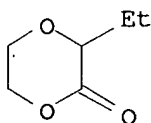
IT 3206-98-2P, Butyric acid, 2-(2-hydroxyethoxy)-,  $\delta$ -lactone  
 4384-04-7P, Hexanoic acid, 2-(2-hydroxyethoxy)-,  $\delta$ -lactone  
 4445-21-0P, Octadecanoic acid, 2-(2-hydroxyethoxy)-,  $\delta$ -lactone  
 5981-23-7P, Tetradecanoic acid, 2-(2-hydroxyethoxy)-,  $\delta$ -lactone  
 6005-35-2P, Hexadecanoic acid, 2-(2-hydroxyethoxy)-,  $\delta$ -lactone  
 6049-61-2P, Decanoic acid, 2-(2-hydroxyethoxy)-,  $\delta$ -lactone  
 6812-57-3P, Dodecanoic acid, 2-(2-hydroxyethoxy)-,  $\delta$ -lactone  
 91243-84-4P, Octanoic acid, 2-(2-hydroxyethoxy)-, methyl ester  
 92862-45-8P, Dodecanoic acid, 2-(2-hydroxyethoxy)-, methyl ester

RL: PREP (Preparation)

(preparation of)

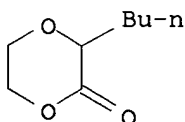
RN 3206-98-2 HCAPLUS

CN 1,4-Dioxan-2-one, 3-ethyl- (9CI) (CA INDEX NAME)



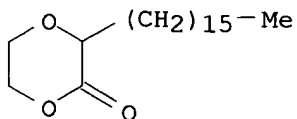
RN 4384-04-7 HCAPLUS

CN 1,4-Dioxan-2-one, 3-butyl- (9CI) (CA INDEX NAME)



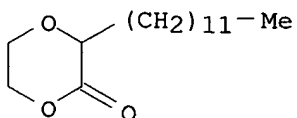
RN 4445-21-0 HCAPLUS

CN 1,4-Dioxan-2-one, 3-hexadecyl- (9CI) (CA INDEX NAME)



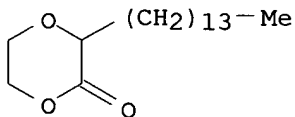
RN 5981-23-7 HCAPLUS

CN p-Dioxan-2-one, 3-dodecyl- (8CI) (CA INDEX NAME)



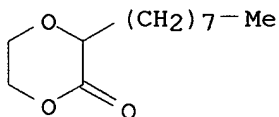
RN 6005-35-2 HCAPLUS

CN 1,4-Dioxan-2-one, 3-tetradecyl- (9CI) (CA INDEX NAME)



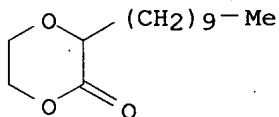
RN 6049-61-2 HCAPLUS

CN 1,4-Dioxan-2-one, 3-octyl- (9CI) (CA INDEX NAME)



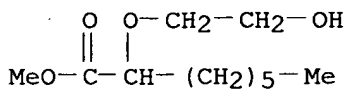
RN 6812-57-3 HCAPLUS

CN 1,4-Dioxan-2-one, 3-decyl- (9CI) (CA INDEX NAME)



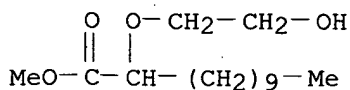
RN 91243-84-4 HCAPLUS

CN Octanoic acid, 2-(2-hydroxyethoxy)-, methyl ester (7CI) (CA INDEX NAME)



RN 92862-45-8 HCAPLUS

CN Dodecanoic acid, 2-(2-hydroxyethoxy)-, methyl ester (7CI) (CA INDEX NAME)



L12 ANSWER 33 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1962:79238 HCAPLUS

DOCUMENT NUMBER: 56:79238

ORIGINAL REFERENCE NO.: 56:15419b-f

TITLE: Preparation of aminoalkyl esters of benzoic acid

AUTHOR(S): Ioffe, D. V.; Kuznetsov, S. G.

CORPORATE SOURCE: Toxicol. Inst., Acad. Med. Sci., Leningrad

SOURCE: Zhurnal Obshchei Khimii (1961), 31, 3051-6

CODEN: ZOKHAA4; ISSN: 0044-460X

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB Refluxing benzoic acid with  $\text{BrCH}_2\text{CH}_2\text{OH}$  in the presence of  $\text{H}_2\text{SO}_4$  in  $\text{C}_6\text{H}_6$  with azeotropic removal of  $\text{H}_2\text{O}$  5-6 hrs. gave 76%  $\text{Ph}_2\text{C}(\text{CO}_2\text{H})\text{OCH}_2\text{CH}_2\text{Br}$ , m.  $143.5^\circ$ , and 14% more soluble 2-bromoethyl benzoate, b2  $187-90^\circ$ . Similarly,  $\text{ClCH}_2\text{CH}_2\text{OH}$  gave 20% 2-chloroethyl benzoate, b3  $178-84^\circ$ , and 74%  $\text{Ph}_2\text{C}(\text{CO}_2\text{H})\text{OCH}_2\text{CH}_2\text{Cl}$ , m.  $129^\circ$ .  $\text{ICH}_2\text{CH}_2\text{OH}$  similarly gave only 91%  $\text{Ph}_2\text{C}(\text{CO}_2\text{H})\text{OCH}_2\text{CH}_2\text{I}$ , decomposed at  $154^\circ$ . Refluxing  $\text{Ph}_2\text{C}(\text{CO}_2\text{H})\text{OCH}_2\text{CH}_2\text{X}$  with pyridine,  $\text{Et}_3\text{N}$  or diethanolamine in  $\text{C}_6\text{H}_6$  1 hr. gave 100% 3,3-diphenyl-2-oxo-1,4-dioxane, m.  $98^\circ$ , also formed by the action of  $\text{EtONa}-\text{EtOH}$ , or from the reaction of  $\text{HOCH}_2\text{CH}_2\text{OH}$  with Na followed by  $\text{Ph}_2\text{CClCOCl}$  in xylene. Refluxing the dioxane derivative with  $\text{EtOH}$  containing some Na 1 hr. gave a precipitate of  $\text{Ph}_2\text{C}(\text{CO}_2\text{Na})\text{OCH}_2\text{CH}_2\text{OH}$ , which

after

acidification gave the free acid, m.  $118-20^\circ$ , and which lactonized on being heated in  $\text{C}_6\text{H}_6$  or on standing. The Na salt and p-nitrobenzyl bromide gave  $\text{Ph}_2\text{C}(\text{OCH}_2\text{CH}_2\text{OH})\text{CO}_2\text{CH}_2\text{C}_6\text{H}_4\text{NO}_2$ -p, m.  $120^\circ$ . Heating  $\text{Ph}_2\text{CClCOCl}$  with  $\text{BrCH}_2\text{CH}_2\text{OH}$  at  $120^\circ$  (finally 2 hrs. at  $140^\circ$ ) gave after an aqueous treatment 82%  $\text{Ph}_2\text{CClCO}_2\text{CH}_2\text{CH}_2\text{Br}$ , b8  $193-4^\circ$ , n20D 1.5917, d20 1.4320, which refluxed 2 hrs. in  $\text{C}_6\text{H}_6$  with  $\text{Et}_2\text{NH}$  gave after the usual treatment 56% diethylaminoethyl benzoate HCl salt m.  $174-5^\circ$  ( $\text{EtOH}-\text{Me}_2\text{CO}$ ). Similarly,  $\text{Me}_2\text{NH}$  gave the dimethylaminoethyl analog, m.  $185^\circ$ . Benzoic acid refluxed in  $\text{C}_6\text{H}_6$  with  $\text{HOCH}_2\text{CH}_2\text{OH}$  in the presence of  $\text{H}_2\text{SO}_4$  gave in 5-6 hrs. 81% 2-hydroxyethyl benzoate, m.  $96^\circ$ , which gave the p-toluenesulfonate, m.  $111-13^\circ$ , on being treated with tosyl chloride in  $\text{Me}_2\text{CO}-\text{K}_2\text{CO}_3$ . This refluxed in  $\text{MePh}$  1 hr. with N-methylaminobutanol then treated with aqueous HCl gave after addition of  $\text{NH}_4\text{OH}$  67% N-methyl-N-(8-hydroxybutyl)aminoethyl benzoate, m.  $70-70.5^\circ$ .

IT 95319-69-0P, Acetic acid, (2-hydroxyethoxy)diphenyl-,

p-nitrobenzyl ester 97754-49-9P, Acetic acid,

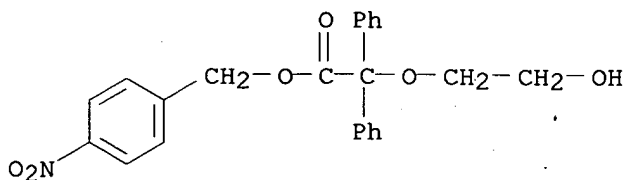
(2-hydroxyethoxy)diphenyl-,  $\delta$ -lactone

RL: PREP (Preparation)

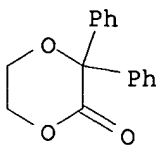
(preparation of)

RN 95319-69-0 HCAPLUS

CN Acetic acid, (2-hydroxyethoxy)diphenyl-, p-nitrobenzyl ester (7CI) (CA INDEX NAME)



RN 97754-49-9 HCAPLUS  
CN 1,4-Dioxan-2-one, 3,3-diphenyl- (9CI) (CA INDEX NAME)



=> d his

(FILE 'HOME' ENTERED AT 13:12:57 ON 10 JAN 2007)

FILE 'CASREACT' ENTERED AT 13:13:13 ON 10 JAN 2007

L1 STRUCTURE UPLOADED  
L2 0 S L1  
L3 1 S L1 FULL

FILE 'REGISTRY' ENTERED AT 13:14:17 ON 10 JAN 2007

L4 STRUCTURE UPLOADED  
L5 5 S L4  
L6 610 S L4 FULL  
L7 STRUCTURE UPLOADED  
L8 3 S L7  
L9 678 S L7 FULL

FILE 'HCAPLUS, CHEMCATS' ENTERED AT 13:18:44 ON 10 JAN 2007

L10 957 S L6  
L11 431 S L9  
L12 33 S L10 AND L11

=> s l5

L13 5 L5

=> d 1-5 ibib abs hitstr  
COMMAND INTERRUPTED

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Desk by telephone or via SEND in the STNMAIL file.

=> d l13 1-5 ibib abs

L13 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:137293 HCAPLUS

DOCUMENT NUMBER: 134:198084

TITLE: Biodegradable alkylene oxide block copolymer  
compositions for solubilizing poorly water-soluble  
drugs and drug delivery compositions containing the  
same same

INVENTOR(S): Seo, Min-Hyo; Choi, In-Ja

PATENT ASSIGNEE(S): Samyang Corporation, S. Korea

SOURCE: PCT Int. Appl., 24 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001012718	A1	20010222	WO 2000-KR885	20000810
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
KR 2001017804	A	20010305	KR 1999-33500	19990814
CA 2381729	A1	20010222	CA 2000-2381729	20000810
AU 2000064792	A	20010313	AU 2000-64792	20000810
AU 763154	B2	20030717		
EP 1226212	A1	20020731	EP 2000-952029	20000810
EP 1226212	B1	20061011		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP 3363142	B1	20030108	JP 2001-517608	20000810
JP 2003507514	T	20030225		
NZ 517036	A	20030725	NZ 2000-517036	20000810
AT 342306	T	20061115	AT 2000-952029	20000810
US 6616941	B1	20030909	US 2001-807487	20010713
PRIORITY APPLN. INFO.:			KR 1999-33500	A 19990814
			WO 2000-KR885	W 20000810

AB The composition capable of forming a micelle in body fluids or in an aqueous medium

and solubilizing poorly water-soluble drugs, comprises an amphiphilic block copolymer having a hydrophilic poly(alkylene glycol) block and hydrophobic biodegradable polymer block in a poly(ethylene glycol) medium. Thus, 20 g poly(ethylene glycol) monomethyl ether was reacted with 19 g DL-lactide in presence of 24.5 mg stannous octoate to form a diblock copolymer with mol. weight 1850-2000 daltons in yield 95%.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1996:268463 HCAPLUS

DOCUMENT NUMBER: 125:32968

TITLE: Steric and Stereoelectronic Control of the Mode Selectivity as a Function of Alkene Structure in the Reaction with Dimethyl  $\alpha$ -Peroxy Lactone: Cycloadducts and Ene Products versus Epoxides

AUTHOR(S): Adam, Waldemar; Blancafort, Lluís

CORPORATE SOURCE: Institute of Organic Chemistry, University of Wuerzburg, Wuerzburg, D-97074, Germany

SOURCE: Journal of the American Chemical Society (1996), 118(20), 4778-87

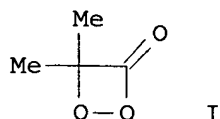
CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



AB The oxidation of di-, tri-, and tetrasubstituted alkenes by peroxy lactone I affords cycloaddn., ene, and epoxidn. products. In the presence of methanol, trapping products are also obtained. The observed dichotomy in the product distribution requires two different paths for this reaction, namely, a path via an open, stretched 1,6-dipole and another path for epoxidn. Both paths arise from an SN2 attack of the double bond of the alkene on the peroxide bond of I, the first unsym. (end-on attack), leading to the 1,6-dipole, and the second sym. (central attack) with respect to the approach of the double bond, leading to epoxidn. The 1,6-dipole is postulated to afford the cycloadducts, of which the thermodyn. favored diastereomers are obtained, and the ene products. In the epoxidn., the  $\alpha$ -lactone released after oxygen transfer oligomerizes to a polyester or, in the presence of methanol, is trapped as an  $\alpha$ -methoxy acid. The reaction is regioselective both with respect to the attacked oxygen atom of I, as revealed by the trapping products, as well as with respect to the attacking carbon atom for unsym. alkenes, as displayed by the ene products. The former regioselectivity is dictated by the inherent polarization of the peroxide bond through the carbonyl group which makes the alkoxy oxygen the more electrophilic one toward nucleophilic attack, while for the latter the incipient pos. charge of the open 1,6-dipole is better stabilized by the more substituted carbon atom of the end-on attacking unsym. alkene. The preferred reaction mode has been found to be sensitive to the structure of the alkene, and the difference in reactivity has been explained in terms of steric and stereoelectronic factors. Thus, for the sterically less hindered cis-di- and trisubstituted alkenes the path along the open 1,6-dipole is favored (stereoelectronic control), while the more sterically demanding trans-di- and tetrasubstituted alkenes react by the epoxidn. mode (steric control).

L13 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1996:158253 HCAPLUS

DOCUMENT NUMBER: 124:289375

TITLE: Synthesis of inhibitors of imidazole glycerol phosphate dehydratase

AUTHOR(S): Lindell, Stephen D.; Earnshaw, Cristopher G.; Wright, Brian J.; Carver, David S.; O'Mahony, Mary J.; Saville-Stones, Elizabeth A.

CORPORATE SOURCE: AgrEvo UK Limited, Saffron Walden, CB10 1XL, UK

SOURCE: Bioorganic & Medicinal Chemistry Letters (1996), 6(5), 547-52

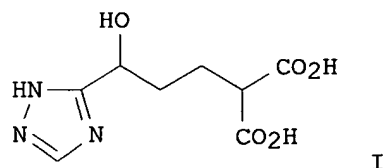
CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

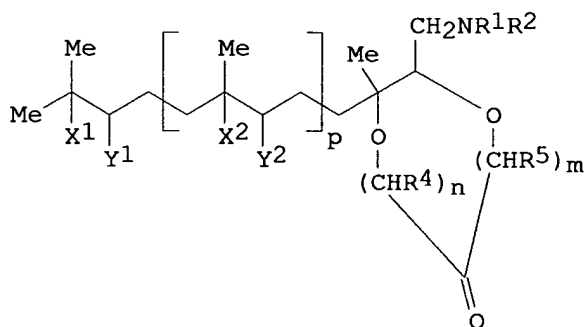
GI



AB Novel inhibitors  $\text{HOCHR}(\text{CH}_2)_n\text{CH}(\text{CO}_2\text{H})_2$  [ $\text{R} = 1\text{H}-1,2,4\text{-triazol-5-yl}$ ,  $1,2,4\text{-triazol-1-yl}$ ;  $n = 1-3$ ] of the newly discovered herbicide target enzyme imidazole glycerol phosphate dehydratase were prepared. The most potent inhibitor was the analog  $\text{RCH}_2\text{CH}(\text{OH})\text{CH}_2\text{CH}_2\text{P}(\text{O})(\text{OH})_2$  [ $\text{R} = 1,2,4\text{-triazol-1-yl}$ ]. The best of the prepared compds. was I ( $\text{IC}_{50} = 6 \mu\text{M}$ ).

ACCESSION NUMBER: 1991:122766 HCAPLUS  
 DOCUMENT NUMBER: 114:122766  
 TITLE: Preparation of N-containing terpene lactones and cerebral function improvers containing them  
 INVENTOR(S): Yoshida, Koichi; Sho, Kyohiko; Kanehira, Koichi; Shiono, Manzo; Yamahara, Joji  
 PATENT ASSIGNEE(S): Kuraray Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02243684	A	19900927	JP 1989-64681	19890315
PRIORITY APPLN. INFO.:			JP 1989-64681	19890315
OTHER SOURCE(S):	MARPAT 114:122766			
GI				



AB The title compds. [I; R1, R2 = (un)substituted lower alkyl, (un)substituted aryl, (un)substituted 4-piperidyl, pyridyl, pyridinecarbonyl, isoquinolyl; NR1R2 may form 5- or 6-membered heterocyclyl (which may contain 1-3 O, S, NR3, CO, CH2CH2, CH:CR3, CH:N, and/or 1,2-phenylene); R3 = H, (un)substituted lower alkyl, (un)substituted aryl; R4, R5 = H, lower alkyl; X1 = H, OH; Y1 = H; X1Y1 may form bond; X2 = H, OH; Y2 = H; X2Y2 may form bond; when n = 1 or 0, then m = 0 or 1, resp.; p = 0-2], useful for treatment of cerebral ischemia, anoxia, dementia, etc., were prepared 1-(1H-Imidazol-1-yl)-3,7,11-trimethyl-2,3-dodecanediol was treated with BuLi in THF at 10° for 1 h and the mixture was treated with Et bromoacetate to give 50% 6-(4,8-dimethylnonyl)-6-methyl-5-(1H-imidazol-1-yl)methyl-1,4-dioxan-2-one (II), which at 100 mg/kg (no information on administration route) inhibited KCN-induced anoxia in mice, resulting in survival rate of 88.9%. LD50 values of I were ≥2000 mg/kg p.o. in mice. Capsules were formulated containing II 5, crystalline cellulose 80, corn starch 20, lactose 22, and poly(vinylpyrrolidone) 3 g.

DOCUMENT NUMBER: 75:129733  
 TITLE: Derivatives of 1,4-dioxan-2-one  
 AUTHOR(S): Pailer, M.; Streicher, W.; Huebsch, W. J.  
 CORPORATE SOURCE: Org. Chem. Inst., Univ. Wien, Vienna, Austria  
 SOURCE: Monatsh. Chem. (1971), 102(4), 1048-54  
 CODEN: MOCHAP  
 DOCUMENT TYPE: Journal  
 LANGUAGE: German  
 OTHER SOURCE(S): CASREACT 75:129733  
 AB 3,3-Diphenyl-1,4-dioxan-2-one and its 6-chloromethyl and  
 6-(2-bromoethyl)-derivs. were prepared in nearly quant. yield by treating  
 benzoic acid with HOCH<sub>2</sub>CH<sub>2</sub>OH (R = H, CH<sub>2</sub>Cl, CH<sub>2</sub>CH<sub>2</sub>Br) with removal of the  
 H<sub>2</sub>O formed. No isomeric product was obtained. The halogen atoms of the  
 alkyl side chains were replaced by NEt<sub>2</sub>, piperidino, pyrrolidino, or  
 morpholino. The 6-aminoalkyl-3,3-diphenyl-1,4-dioxan-2-ones obtained had  
 a spasmolytic activity approx. 20% that of papaverine.

=> file hcaplus hcaold uspatfull efull  
 COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
249.65	710.31

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-30.42	-30.42

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FILE 'USPATFULL' ENTERED AT 13:32:59 ON 10 JAN 2007  
 CA INDEXING COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'EPFULL' ENTERED AT 13:32:59 ON 10 JAN 2007  
 COPYRIGHT (C) 2007 European Patent Office / FIZ Karlsruhe

=> s lactic acid derivative or lactic acid ester? or ?lactate or lactate ester?  
 L14 174863 LACTIC ACID DERIVATIVE OR LACTIC ACID ESTER? OR ?LACTATE OR  
 LACTATE ESTER?

=> s l14 and (epoxide or epoxy compound or ?oxirane)  
 L15 5876 L14 AND (EPOXIDE OR EPOXY COMPOUND OR ?OXIRANE)

=> s l15 and (coupl? or condens?)  
 L16 4695 L15 AND (COUPL? OR CONDENS?)

=> s l16 and (boron trifluoride or BF<sub>3</sub> or acid catalyst or mineral acid or solid  
 acid)  
 L17 1038 L16 AND (BORON TRIFLUORIDE OR BF<sub>3</sub> OR ACID CATALYST OR MINERAL  
 ACID OR SOLID ACID)

=> s glycidyl lactate  
 L18 2 GLYCIDYL LACTATE

=> s l17 and (ring closing or ring closure or cycliz? or cyclis?)

L19 167 L17 AND (RING CLOSING OR RING CLOSURE OR CYCLIZ? OR CYCLIS?)

=> s l19 and (saponific? or acidifi? or transesterif?)

L20 98 L19 AND (SAPONIFIC? OR ACIDIFI? OR TRANSESTERIF?)

=> s l20 and (?propionate or ?propionate ester)

L21 62 L20 AND (?PROPIONATE OR ?PROPIONATE ESTER)

=> s l21 and (fragrance or flavor or flavour or organoleptic)

L22 12 L21 AND (FRAGRANCE OR FLAVOR OR FLAVOUR OR ORGANOLEPTIC)

=> d 1-12 ibib abs

L22 ANSWER 1 OF 12 USPATFULL on STN

ACCESSION NUMBER: 2006:175282 USPATFULL

TITLE: Inhibition of NF-kappaB by triterpene compositions

INVENTOR(S): Gutterman, Jordan U., Houston, TX, UNITED STATES

Haridas, Valsala, Houston, TX, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2006148732	A1	20060706
APPLICATION INFO.:	US 2001-992556	A1	20011116 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-249710P	20001117 (60)
	US 2001-322859P	20010917 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Robert E. Hanson, FULBRIGHT & JAWORSKI L.L.P., SUITE 2400, 600 CONGRESS AVENUE, AUSTIN, TX, 78701, US	
NUMBER OF CLAIMS:	55	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	55 Drawing Page(s)	
LINE COUNT:	9565	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides methods for the inhibition of inflammation by providing, to a cell, in need thereof, monoterpene compositions that inhibit NF-κB. These compositions may also contain a carrier moiety that renders the monoterpene composition membrane permeable. The carrier may include triterpenoid moieties, sugars, lipids, or even additional monoterpene moieties. The composition can also contain additional chemical functionalities. Methods for using these compounds to prevent and treat a wide range of inflammatory conditions, especially, premalignant inflammatory conditions are described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 2 OF 12 USPATFULL on STN

ACCESSION NUMBER: 2006:160035 USPATFULL

TITLE: CaSR antagonist

INVENTOR(S): Shinagawa, Yuko, Osaka, JAPAN  
Inoue, Teruhiko, Osaka, JAPAN  
Kiguchi, Toshihiro, Osaka, JAPAN  
Ikenogami, Taku, Osaka, JAPAN  
Ogawa, Naoki, Osaka, JAPAN  
Nakagawa, Takashi, Osaka, JAPAN  
Shindo, Masanori, Osaka, JAPAN  
Soejima, Yuki, Osaka, JAPAN

PATENT ASSIGNEE(S): JAPAN TOBACCO INC., Tokyo, JAPAN (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2006135572	A1	20060622
APPLICATION INFO.:	US 2005-286378	A1	20051125 (11)
RELATED APPLN. INFO.:	Continuation of Ser. No. WO 2004-JP7758, filed on 28 May 2004, UNKNOWN		

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2003-151610	20030528
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	FITZPATRICK CELLA HARPER & SCINTO, 30 ROCKEFELLER PLAZA, NEW YORK, NY, 10112, US	
NUMBER OF CLAIMS:	10	
EXEMPLARY CLAIM:	1	
LINE COUNT:	2386	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides a compound having a calcium-sensitive receptor antagonistic action, a pharmaceutical composition containing the compound, particularly a calcium receptor antagonist and a therapeutic drug for osteoporosis. A compound represented by the following formula (1), a pharmaceutically acceptable salt thereof or an optically active form thereof: ##STR1## wherein each symbol is as defined in the description.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 3 OF 12 USPATFULL on STN

ACCESSION NUMBER: 2006:124270 USPATFULL  
 TITLE: Preparation of lactic acid derivatives and their use  
 INVENTOR(S): Selifonov, Sergey, Plymouth, MN, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2006105002	A1	20060518
APPLICATION INFO.:	US 2003-523059	A1	20030724 (10)
	WO 2003-US23119		20030724
			20051017 PCT 371 date

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-400474P	20020802 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	FISH & RICHARDSON P.C., PO BOX 1022, MINNEAPOLIS, MN, 55440-1022, US	
NUMBER OF CLAIMS:	17	
EXEMPLARY CLAIM:	1	
LINE COUNT:	803	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to preparing lactic acid derivatives that are useful as odorants and monomers for polymer synthesis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 4 OF 12 USPATFULL on STN

ACCESSION NUMBER: 2006:49285 USPATFULL  
 TITLE: Therapeutic uses of tri-aryl acid derivatives  
 INVENTOR(S): Jayyosi, Zaid, Flemington, NJ, UNITED STATES  
 McGeehan, Gerard M., Chester Springs, PA, UNITED STATES  
 Kelley, Michael F., West Chester, PA, UNITED STATES

Labaudiniere, Richard F., Collegeville, PA, UNITED STATES  
 Zhang, Litao, Kennett Square, PA, UNITED STATES  
 Groneberg, Robert D., Boulder, CO, UNITED STATES  
 McGarry, Daniel G., King of Prussia, PA, UNITED STATES  
 Caulfield, Thomas J., Paris, FRANCE  
 Minnich, Anne, Flemington, NJ, UNITED STATES  
 Bobko, Mark, Exton, PA, UNITED STATES  
 Morris, Robert, Wayne, PA, UNITED STATES  
 Aventis Pharma Deutschland GmbH, Frankfurt am Main, GERMANY, FEDERAL REPUBLIC OF (non-U.S. corporation)

PATENT ASSIGNEE(S):

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 7005440	B1	20060228
APPLICATION INFO.:	US 2000-724496		20001128 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. WO 2000-US11490, filed on 28 Apr 2000, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-131454P	19990428 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Wilson, James O.	
ASSISTANT EXAMINER:	Fedowitz, Matthew L.	
LEGAL REPRESENTATIVE:	Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P.	
NUMBER OF CLAIMS:	56	
EXEMPLARY CLAIM:	1,10	
LINE COUNT:	6330	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The use of triaryl acid derivatives of formula (I) ##STR1## and their pharmaceutical compositions as PPAR ligand receptor binders. The PPAR ligand receptor binders of this invention are useful as agonists or antagonists of the PPAR receptor.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 5 OF 12 USPATFULL on STN

ACCESSION NUMBER: 2004:228019 USPATFULL  
 TITLE: Methods and compounds for inhibitting MRP1  
 INVENTOR(S): Kroin, Julian, Indianapolis, IN, UNITED STATES  
 Norman, Bryan Hurst, Indianapolis, IN, UNITED STATES  
 York, Jeremy Schulenburg, Indianapolis, IN, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004176405	A1	20040909
APPLICATION INFO.:	US 2004-797362	A1	20040310 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2002-130800, filed on 21 May 2002, GRANTED, Pat. No. US 6743794 A 371 of International Ser. No. WO 2000-US32443, filed on 11 Dec 2000, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-171373P	19991222 (60)
	US 2000-226076P	20000817 (60)
	US 2000-234539P	20000922 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	

LEGAL REPRESENTATIVE: ELI LILLY AND COMPANY, PATENT DIVISION, P.O. BOX 6288,  
INDIANAPOLIS, IN, 46206-6288

NUMBER OF CLAIMS: 71

EXEMPLARY CLAIM: 1

LINE COUNT: 12657

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention further relates to a method of inhibiting MRPl in  
a mammal which comprises administering to a mammal in need thereof an  
effective amount of a compound of formula (I). ##STR1##

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 6 OF 12 USPATFULL on STN

ACCESSION NUMBER: 2003:244959 USPATFULL

TITLE: Spiro compounds as inhibitors of fibrinogen-dependent  
platelet aggregation

INVENTOR(S): Fisher, Matthew J., Carmel, IN, UNITED STATES  
Jakubowski, Joseph A., Indianapolis, IN, UNITED STATES  
Masters, John J., Indianapolis, IN, UNITED STATES  
Mullaney, Jeffrey T., Indianapolis, IN, UNITED STATES  
Paal, Michael, Hamburg, GERMANY, FEDERAL REPUBLIC OF  
Ruhter, Gerd, Hamburg, GERMANY, FEDERAL REPUBLIC OF  
Ruterbories, Kenneth J., Indianapolis, IN, UNITED  
STATES  
Scarborough, Robert M., Belmont, CA, UNITED STATES  
Schotten, Theo, Vierhoefen, GERMANY, FEDERAL REPUBLIC  
OF  
Stenzel, Wolfgang, Reinbek, GERMANY, FEDERAL REPUBLIC  
OF

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003171373	A1	20030911
	US 6693109	B2	20040217
APPLICATION INFO.:	US 2003-354265	A1	20030129 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2001-899886, filed on 6 Jul 2001, GRANTED, Pat. No. US 6528534 Division of Ser. No. US 1998-43846, filed on 5 Oct 1998, GRANTED, Pat. No. US 6291469 A 371 of International Ser. No. WO 1996-US15703, filed on 27 Sep 1996, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1995-4557P	19950929 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	KNOBBE MARTENS OLSON & BEAR LLP, 2040 MAIN STREET, FOURTEENTH FLOOR, IRVINE, CA, 92614	

NUMBER OF CLAIMS: 22

EXEMPLARY CLAIM: 1

LINE COUNT: 3045

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to certain spirocyclic compounds substituted with  
both basic and acidic functionality, which are useful in inhibition of  
platelet aggregation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 7 OF 12 USPATFULL on STN

ACCESSION NUMBER: 2003:146829 USPATFULL

TITLE: Methods and compounds for inhibiting mrpl

INVENTOR(S): Bonjouklian, Rosanne, Zionsville, IN, UNITED STATES

Cohen, Jeffrey Daniel, Indianapolis, IN, UNITED STATES  
 Gruber, Joseph Michael, Brownsburg, IN, UNITED STATES  
 Johnson, Douglas Webb, Zionsville, IN, UNITED STATES  
 Jungheim, Louis Nickolaus, Indianapolis, IN, UNITED STATES  
 Kroin, Julian Stanley, Indianapolis, IN, UNITED STATES  
 Lander, Peter Ambrose, Indianapolis, IN, UNITED STATES  
 Lin, Ho-Shen, Indianapolis, IN, UNITED STATES  
 Lohman, Mark Christopher, Boulder, CO, UNITED STATES  
 Muehl, Brian Stephen, Greenwood, IN, UNITED STATES  
 Norman, Bryan Hurst, Indianapolis, IN, UNITED STATES  
 Patel, Vinod Francis, Acton, MA, UNITED STATES  
 Richett, Michael Enrico, Indianapolis, IN, UNITED STATES  
 Thrasher, Kenneth Jeff, Indianapolis, IN, UNITED STATES  
 Vepachedu, Sreenivasarao, Palo Alto, CA, UNITED STATES  
 White, Wesley Todd, Indianapolis, IN, UNITED STATES  
 Xie, Yongping, Naperville, IL, UNITED STATES  
 York, Jeremy Schulenburg, Indianapolis, IN, UNITED STATES  
 Parkhurst, Brandon Lee, Indianapolis, IN, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003100576	A1	20030529
	US 6743794	B2	20040601
APPLICATION INFO.:	US 2002-130800	A1	20020521 (10)
	WO 2000-US32443		20001211
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	ELI LILLY AND COMPANY, PATENT DIVISION, P.O. BOX 6288, INDIANAPOLIS, IN, 46206-6288		
NUMBER OF CLAIMS:	71		
EXEMPLARY CLAIM:	1		
LINE COUNT:	14296		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			
AB	The present invention further relates to a method of inhibiting MRPl in a mammal which comprises administering to a mammal in need thereof an effective amount of a compound of formula (I).		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 8 OF 12 USPATFULL on STN

ACCESSION NUMBER: 2002:22489 USPATFULL

TITLE: Spiro compounds as inhibitors of fibrinogen-dependent platelet aggregation

INVENTOR(S): Fisher, Matthew J., Carmel, IN, UNITED STATES  
 Jakubowski, Joseph A., Indianapolis, IN, UNITED STATES  
 Masters, John J., Indianapolis, IN, UNITED STATES  
 Mullaney, Jeffrey T., Indianapolis, IN, UNITED STATES  
 Ruterbories, Kenneth J., Indianapolis, IN, UNITED STATES  
 Paal, Michael, Hamburg, GERMANY, FEDERAL REPUBLIC OF  
 Ruhter, Gerd, Hamburg, GERMANY, FEDERAL REPUBLIC OF  
 Schotten, Theo, Vierhoefen, GERMANY, FEDERAL REPUBLIC OF  
 Stenzel, Wolfgang, Reinbek, GERMANY, FEDERAL REPUBLIC OF  
 Scarborough, Robert M., Belmont, CA, UNITED STATES

NUMBER	KIND	DATE
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PATENT INFORMATION: US 2002013325 A1 20020131  
 US 6528534 B2 20030304  
 APPLICATION INFO.: US 2001-899886 A1 20010706 (9)  
 RELATED APPLN. INFO.: Division of Ser. No. US 1998-43846, filed on 5 Oct  
 1998, GRANTED, Pat. No. US 6291469 A 371 of  
 International Ser. No. WO 1996-US15703, filed on 27 Sep  
 1996, UNKNOWN

	NUMBER	DATE
PRIORITY INFORMATION:	US 1995-4557P	19950929 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	KNOBBE MARTENS OLSON & BEAR LLP, 620 NEWPORT CENTER DRIVE, SIXTEENTH FLOOR, NEWPORT BEACH, CA, 92660	
NUMBER OF CLAIMS:	26	
EXEMPLARY CLAIM:	1	
LINE COUNT:	3239	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		
AB	This invention relates to certain spirocyclic compounds substituted with both basic and acidic functionality, which are useful in inhibition of platelet aggregation.	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 9 OF 12 USPATFULL on STN

ACCESSION NUMBER: 2001:158292 USPATFULL  
 TITLE: Spiro compounds as inhibitors of fibrinogen-dependent  
platelet aggregation  
 INVENTOR(S): Fisher, Matthew J., Carmel, IN, United States  
 Jakubowski, Joseph A., Indianapolis, IN, United States  
 Masters, John J., Indianapolis, IN, United States  
 Mullaney, Jeffrey T., Indianapolis, IN, United States  
 Ruterbories, Kenneth J., Indianapolis, IN, United  
 States  
 Paal, Michael, Hamburg, Germany, Federal Republic of  
 Ruhter, Gerd, Hamburg, Germany, Federal Republic of  
 Scarborough, Robert M., Belmont, CA, United States  
 Schotten, Theo, Vierhoeften, Germany, Federal Republic  
 of  
 Stenzel, Wolfgang, Reinbek, Germany, Federal Republic  
 of  
 PATENT ASSIGNEE(S): Eli Lilly and Company, Indianapolis, IN, United States  
 (U.S. corporation)  
 COR Therapeutics Inc., San Francisco, CA, United States  
 (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6291469	B1	20010918
	WO 9711940		19970403
APPLICATION INFO.:	US 1998-43846		19981005 (9)
	WO 1996-US15703		19960927
			19981005 PCT 371 date
			19981005 PCT 102(e) date

	NUMBER	DATE
PRIORITY INFORMATION:	US 1995-4557P	19950929 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Raymond, Richard L.	

ASSISTANT EXAMINER: Rao, Deepak R.  
LEGAL REPRESENTATIVE: Knobbe, Martens Olson & Bear, LLP  
NUMBER OF CLAIMS: 41  
EXEMPLARY CLAIM: 1  
LINE COUNT: 3418  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB This invention relates to certain spirocyclic compounds substituted with both basic and acidic functionality, as shown by formula (I): ##STR1##

wherein Q, L, A.sub.i, B.sub.j, R.sub.0, R.sub.3, R.sub.10, m, n, p and q are as defined in the disclosure, which are useful in inhibiting of platelet aggregation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 10 OF 12 EPFULL COPYRIGHT 2007 EPO/FIZ KA on STN

ACCESSION NUMBER: 2004:60102 EPFULL  
ENTRY DATE PATENT: 20050203  
ENTRY DATE PUBLICATION: 20060302  
UPDATE DATE PUBLICAT.: 20060906  
DATA UPDATE DATE: 20060906  
DATA UPDATE WEEK: 200636  
TITLE (ENGLISH): CaSR ANTAGONIST  
TITLE (FRENCH): ANTAGONISTE DE CASR  
TITLE (GERMAN): CASR-ANTAGONIST  
INVENTOR(S): Shinagawa, Yuko, 1-1 Murasaki-cho, Takatsuki-shi, Osaka 569-1125, JP; Inoue, Teruhiko, 1-1 Murasaki-cho, Takatsuki-shi, Osaka 569-1125, JP; Kiguchu, Toshihiro, 1-1 Murasaki-cho, Takatsuki-shi, Osaka 569-1125, JP; Ikenogami, Taku, 1-1 Murasaki-cho, Takatsuki-shi, Osaka 569-1125, JP; Ogawa, Naoki, 1-1 Murasaki-cho, Takatsuki-shi, Osaka 5691125, JP; Nakagawa, Takashi, 1-1 Murasaki-cho, Takatsuki-shi, Osaka 5691125, JP; Shindo, Masanori, 1-1 Murasaki-cho, Takatsuki-shi, Osaka 5691125, JP; Soejima, Yuki, 1-1 Murasaki-cho, Takatsuki-shi, Osaka 5691125, JP  
PATENT APPLICANT(S): Japan Tobacco Inc., 2-1, Toranomom 2-chome, Minato-ku, Tokyo 105-8422, JP  
PATENT APPL. NUMBER: 679466  
AGENT: Vossius & Partner, Postfach 86 07 67, 81634 Muenchen, DE  
AGENT NUMBER: 100311  
DOCUMENT TYPE: Patent  
LANGUAGE OF FILING: Japanese  
LANGUAGE OF PUBL.: English  
LANGUAGE OF PROCEDURE: English  
LANGUAGE OF TITLE: German; English; French  
PATENT INFO TYPE: EPAl Application published with search report  
PATENT INFORMATION:

NUMBER	KIND	DATE
NUMBER	KIND	DATE
EP 1630157	A1	20060301

DESIGNATED STATES:	WO 2004106280	20041209
APPLICATION INFO.:	AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI	
PRIORITY INFO.:	LU MC NL PL PT RO SE SI SK TR	
	EP 2004-735338	A 20040528
	WO 2004-JP7758	A 20040528
	JP 2003-151610	A 20030528

ABEN

The present invention provides a compound having a calcium-sensitive receptor antagonistic action, a pharmaceutical composition containing the compound, particularly a calcium receptor antagonist and a therapeutic drug for osteoporosis. A compound represented by the following formula (1), a pharmaceutically acceptable salt thereof or an optically active form thereof:

(image, imga0001.tif, chem)

wherein each symbol is as defined in the description.

L22 ANSWER 11 OF 12 EPFULL COPYRIGHT 2007 EPO/FIZ KA on STN

ACCESSION NUMBER: 2000:120536 EPFULL  
UPDATE DATE PUBLICAT.: 20051109  
DATA UPDATE DATE: 20051109  
DATA UPDATE WEEK: 200545  
TITLE (ENGLISH): METHODS AND COMPOUNDS FOR INHIBITING MRP1  
TITLE (FRENCH): METHODES ET COMPOSES DESTINES A INHIBER MRP1  
TITLE (GERMAN): VERFAHREN UND VERBINDUNGEN FUEER DIE HEMMUNG VON MRP1  
INVENTOR(S): BONJOUKLIAN, Rosanne, 318 Dominion Drive, Zionsville, IN 46077, US; COHEN, Jeffrey, Daniel, 1411 Shawnee Road, Indianapolis, IN 46260, US; GRUBER, Joseph, Michael, 9272 Shady Bend, Brownsburg, IN 46112, US; JOHNSON, Douglas, Webb, 235 Saddlebrook Court, Zionsville, IN 46077, US; JUNGHEIM, Louis, Nickolaus, 8218 Meadowbrook Dive, Indianapolis, IN 46240, US; KROIN, Julian, Stanley, 8418 Hilltop Drive, Indianapolis, IN 46234, US; LANDER, Peter, Ambrose, 5407 North Capitol Avenue, Indianapolis, IN 46208, US; LIN, Ho-Shen, 8128 Trevellian Way, Indianapolis, IN 46217, US; LOHMAN, Mark, Christopher, 1924 Oxford Lane, Superior, Colorado 80027, US; MUEHL, Brian, Stephen, 530 Leisure Lane, Greenwood, IN 46142, US; NORMAN, Bryan, Hurst, 8648 Admirals Bay Drive, Indianapolis, IN 46236, US; PATEL, Vinod, Francis, 3 Mossy Lane, Bellows Farm, Acton, MA 01720, US; RICHETT, Michael, Enrico, 5832 Baron Court, Indianapolis, IN 46250, US; THRASHER, Kenneth, Jeff, 8660 Count Turf Court, Indianapolis, IN 46217, US; VEPACHEDU, Sreenivasarao, 1145 Amarillo Avenue, 3 Palo Alto, California, CA 94303, US; WHITE, Wesley, Todd, 5432 Black Bear Circle, Indianapolis, IN 46239, US; XIE, Yongping, 19 Huntington Circle Apartment 15, Naperville, IL 60540, US; YORK, Jeremy Schulenburg, 8866 Doral Drive, Apartment F., Indianapolis, Indiana 46250, US; PARKHURST, Brandon, Lee, 144 Jonquill Drive, Indianapolis, IN 46227, US; WANG, Quiping, 1404 Aspen Glen Drive, Hamden, Connecticut 06518, US  
PATENT APPLICANT(S): ELI LILLY AND COMPANY, Lilly Corporate Center, Indianapolis, Indiana 46285, US  
PATENT APPL. NUMBER: 204942  
AGENT: Burnside, Ivan John, Eli Lilly and Company Limited  
Lilly Research Centre Erl Wood Manor Sunninghill Road, Windlesham, Surrey GU20 6PH, GB  
AGENT NUMBER: 91033  
DOCUMENT TYPE: Patent  
LANGUAGE OF FILING: English  
LANGUAGE OF PUBL.: English  
LANGUAGE OF PROCEDURE: English  
LANGUAGE OF TITLE: German; English; French  
PATENT INFO TYPE: EPB1 Granted patent

PATENT INFORMATION:  
PATENT INFORMATION:

	NUMBER NUMBER	KIND KIND	DATE DATE
	EP 1250340	B1	20041117
DESIGNATED STATES:	WO 2001046199		20010628
	AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT		
APPLICATION INFO.:	EP 2000-986242	A	20001211
	WO 2000-US32443	A	20001211
PRIORITY INFO.:	US 1999-171373P	P	19991222
	US 2000-226076P	P	20000817
	US 2000-234539P	P	20000922
CITED PATENT LIT.:	WO 9934897	A	
	WO 9951227	A	
	WO 9951228	A	
	WO 9951236	A	

L22 ANSWER 12 OF 12 EPFULL COPYRIGHT 2007 EPO/FIZ KA on STN

ACCESSION NUMBER: 1996:62745 EPFULL  
 UPDATE DATE PUBLICAT.: 20060406  
 DATA UPDATE DATE: 20060405  
 DATA UPDATE WEEK: 200614  
 TITLE (ENGLISH): SPIRO COMPOUNDS AS INHIBITORS OF FIBRINOGEN-DEPENDENT PLATELET AGGREGATION  
 TITLE (FRENCH): COMPOSES SPIRO COMME INHIBITEURS DE L'AGREGATION DE PLAQUETTES DEPENDANTE DU FIBRINOGENE  
 TITLE (GERMAN): SPIRO VERBINDUNGEN ALS INHIBITOREN DER FIBRINOGEN-ABHAENGIGEN BLUTPLAETTCHEN AGGREGATION  
 INVENTOR(S): FISHER, Matthew, J., 4106 Armon Court, Carmel, IN 46033, US; JAKUBOWSKI, Joseph, A., 3740 Governors Road, Indianapolis, IN 46208, US; MASTERS, John, J., 8338 Crystal Pointe Lane, Indianapolis, IN 46236, US; MULLANEY, Jeffrey, T., 6153 Welker Drive, Indianapolis, IN 46236, US; PAAL, Michael, Hummelsbueteler Kirchenweg 11, D-22335 Hamburg, DE; RUEHTER, Gerd, Vierzigstuecken 53 a, D-21129 Hamburg, DE; RUTERBORIES, Kenneth, J., 6747 Bluffridge Court, Indianapolis, IN 46278, US; SCARBOROUGH, Robert, M., 2544 Belmont Canyon Road, Belmont, CA 94002, US; SCHOTTEN, Theo, Hintern Bach 34, D-21444 Vierhoeften, DE; STENZEL, Wolfgang, Lerchenweg 8, D-21465 Reinbek, DE  
 PATENT APPLICANT(S): ELI LILLY AND COMPANY, Lilly Corporate Center, Indianapolis, Indiana 46285, US; MILLENNIUM PHARMACEUTICALS, INC., 75 Sidney Street, Cambridge, Massachusetts 02139, US  
 PATENT APPL. NUMBER: 204942; 2190396  
 AGENT: Vossius & Partner, Postfach 86 07 67, 81634 Muenchen, DE  
 AGENT NUMBER: 100311  
 DOCUMENT TYPE: Patent  
 LANGUAGE OF FILING: English  
 LANGUAGE OF PUBL.: English  
 LANGUAGE OF PROCEDURE: English  
 LANGUAGE OF TITLE: German; English; French  
 PATENT INFO TYPE: EPB1 Granted patent  
 PATENT INFORMATION:  
 PATENT INFORMATION:

NUMBER	KIND	DATE
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	NUMBER	KIND	DATE
	EP 854869	B1	20040825
	WO 9711940		19970403
DESIGNATED STATES:	AT BE CH DE DK ES FI FR		GB GR IE IT LI LU MC NL PT SE
APPLICATION INFO.:	EP 1996-936093	A	19960927
	WO 1996-US15703	A	19960927
PRIORITY INFO.:	US 1995-4557P	P	19950929
CITED PATENT LIT.:	EP 635492	A	
	EP 655439	A	
	WO 9514683	A	
	WO 9638426	A	
	US 5451578	A	